

A  
DEMOGRAPHIC STUDY OF AN  
EGYPTIAN PROVINCE  
(Sharqiya)

*by*

ABBAS M. AMMAR

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**MONOGRAPHS ON SOCIAL ANTHROPOLOGY**  
**No. 8**

**A**  
**DEMOGRAPHIC STUDY OF AN**  
**EGYPTIAN PROVINCE**  
**(Sharqiya)**

*by*

**ABBAS M. AMMAR**  
**M.A., Ph.D.**

*Lecturer Designate in Geography and Anthropology*  
*Fouad 1st University, Cairo.*

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To  
The Fallaheen of Sharqiya.

The aim of this series of Monographs is to publish results of modern anthropological field-work in a form which will be of primary interest to specialists.

Any profits from the series will be returned to a rotating fund to assist further publications.

The series is under the direction of an Editorial Board associated with the Department of Anthropology of the London School of Economics.

## P R E F A C E.

Sharqiya, on the east side of the Delta, is an extensive province of about 1,280,399 feddans,\* out of which 708,857 feddans are uncultivated areas: waste land (Barari) in the north and sandy desert in the east. Most of the arable land (571,542 feddans), however, yields more than one crop a year (two and in certain areas three), and therefore the total area under various crops - according to the latest agricultural census, 1927 - is 953,867 feddans. Agriculture in Sharqiya depends entirely on irrigation and - with the exception of very limited areas on the edge of the desert dependent on wells - the Nile is the source of the water supply.

The north-east of the province has poor soils which need reclamation. The south-west, with better soils and more adequate irrigation, is on the whole in better condition. The main crops are cereals (i.e. wheat, maize, rice, barley and millet) and cotton, but there is now a spreading tendency to cultivate more fruit trees especially in the eastern sandy parts of the province. The palm tree is a common feature of every village and every field, but, so far, does not play any significant part in the economics of rural Sharqiya.

The means of land utilisation are primitive, and - except on large estates - modern techniques and scientific methods are completely absent. The life of the people is simple, their needs are limited and the standard of living is low. The factors responsible for the difficult conditions of life may be traced to the poverty of the vast majority of the population. Small holdings of less than one feddan are characteristic of Sharqiya, but most of the land is owned by the Government, the nobles and the landlords with extensive estates all over the province.

The real problem is a population one. The trend has been rising rapidly since the beginning of the last century without an equivalent increase in individual incomes. Agricultural labourers are poorly paid and no legislation has yet been considered to defend them against their masters and to fix limits for minimum wages and maximum working hours.

The province is divided administratively into six districts (Markaz): Belbeis, Faqus, Hihya, Kafr Saqr, Minieh El-Qamh and Zagazig M. (See Map I). The chief town of Sharqiya is Zagazig B. on the ancient site of Bubastis.(†)

After field study in Sinai peninsula 1933-4, the writer began to compare data gathered there with data for Sharqiya. This part of the country is of special interest. Not only has it an extremely complex mixture of population but also different types of communities live side by side in certain districts.

Conditions thus vary considerably and a survey was made in 1939 partly as a guide to policy of social reconstruction in this particular community. It is essential to notice that the overwhelming majority of the people of Sharqiya are, directly or indirectly, dependent on the land and the survey necessarily emphasises rural life in which the masses are absorbed.

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\* One feddan = 1.03805 acre.

(†) M. represents Markaz and B, Bandar (Town) in subsequent discussion.

The object of the socio-economic study of Sharqiya was to obtain precise first-hand data about the living conditions of its people, to investigate the causes of the different problems and the effect of such problems on the life of the local community, and finally to follow as far as possible the social changes which are proceeding simultaneously and their reaction upon one another. The empirical data of the survey have already been published in "The Sociological Review" (Vol.XXXII).

The present monograph is a detailed analysis of the main demographic features of the province, the study of which is essential for the true understanding of the socio-economic problems of rural Egypt. So far no such study has been made and therefore it was impossible to compare the situation in Sharqiya with that in any other Egyptian province. However, it is hoped that the present study may stimulate other workers in the same field and that it will not be long before a complete demographic study of all Egypt will be available.

The writer takes the opportunity to acknowledge his indebtedness to Fouad 1st University, Cairo, for financial help, to all members of the Departments of Geography in Cairo and Manchester Universities for inspiring suggestions on all aspects of the work, to Mr. A.M. Carr-Saunders, Director of the London School of Economics and Political Science, and Dr. Raymond Firth for reading the manuscript and to the editorial board of "The Sociological Review" for permission to include in the present monograph tables (XXVIII, XXIX and XXXII-XXXV.), which were published in the Review. His thanks are particularly due to Professor H.J. Fleure for kind encouragement and continuous assistance throughout all stages of his researches.

September, 1941.

A. AMMAR.

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## GENERAL REMARKS

### I

#### THE OBJECT OF THE STUDY AND THE APPRAISAL OF OUR SOURCES OF INFORMATION.

Population is one of the basic factors which are frequently used to account for social changes. The growth of population, its movement and the relation between the number and the quality of the people and the available natural resources are matters of paramount importance, not only in theoretical scientific studies but also in all practical, sound policies for national and international welfare. The object of the present study is twofold. Firstly it is an attempt to start local demographic studies in different parts of Egypt in order to have a clear idea about the actual position of the population problem in different provinces of the country. Secondly such a demographic study is a fundamental step for a true understanding of the social conditions prevailing in any community. Actually we are not primarily concerned with the pure numerical study of the population of Sharqiya. Our real aim is to present a picture of some of the more important aspects of the social life of this particular rural community so far as they help us to understand the standard of living of its people. That is why we do not confine the term "demography" to the narrow sense in which it was first used by Achille Guillard<sup>1</sup> in his "Elements de Statistique Humaine ou Démographie Comparée" (1855). But between the number of the population and the standard of living of the community there exists a complex relationship so intricate and so thoroughly reciprocal, that it is impossible to understand the latter without a complete knowledge of the growth of the population, its density, its distribution by sex and age, its fertility and mortality. Such aspects of the study of the population must precede the two other phases of the question, i.e. the bio-social phase, which is concerned with the differential rates of movement, and the socio-economic phase, in which the interrelations between population and social and economic institutions are studied.<sup>2</sup>

A comprehensive study of the foregoing aspects of the population of Sharqiya is not possible at the present. No data are available for measuring the differential rates of the population movement and, as we shall soon realize, neither the figures given in the census nor the birth and death records are of

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<sup>1</sup>The meaning which Guillard attached to the term was little more than what is comprised in the ordinary vital statistics, gleaned from Census and registration reports. The term has now come to have a much wider meaning that even includes, according to some writers, genealogy, eugenics, anthropometry and statistical pathology. Such broad inclusions of content should be avoided. See:-

- (a) Wolfe, A.B. "Demography", in Encyclopaedia of the Social Sciences.
- (b) "Demography" in Encyclopaedia Britannica, Eleventh Edition.
- (c) Levasseur, E. "Démographie", in La Grande Encyclopédie, Vol. 14.
- (d) Newsholme, Sir Arthur. The Elements of Vital Statistics, p. 20.

<sup>2</sup>For the different approaches to the study of population see:-

- (a) Phelps, H.A. Principles and Laws of Sociology, 1936, p. 193.
- (b) Carr-Saunders, A.M. World Population, 1936, Introduction.
- (c) Wolfe, A.B. "Population", in Encyclopaedia of the Social Sciences.

any help as far as specific fertility and mortality rates are concerned. This latter biological aspect of the problem, however, falls beyond the proper scope of our study. The qualitative aspect is perhaps of greater importance from our standpoint, but bearing in mind that we are dealing with a local population - the overwhelming majority of which are "fallaheen" with more or less the same standard of living - we are not likely to find any significant difference between the fertility rates of the different groups. Such a difference may exist between the rural and urban populations of Egypt but so far information is completely lacking as to the rates of contribution by different social and occupational groups.<sup>3</sup>

Confining our study, therefore, to the quantitative aspect of the population, we must turn to statistics for the necessary "straw out of which we have to make the bricks" of the demographic analysis of the provinces. But before entering upon this analysis we must appraise the accuracy of the available statistical data in order to differentiate between the figures which are the result of careful counting and subsequent verification and those figures which are the result of guesses. Such an appraisal of statistics needs a short review of our sources of information, namely the different censuses and the vital statistical records.

#### THE CENSUS.

Some attempts were made to estimate the population of modern Egypt during the French Campaign and in the time of Muhammad Ali. Such attempts were based on the enumeration of houses without taking a proper census in the scientific sense of the term. These crude estimates, however, are not available for different provinces and we have no figures for the population of Sharqiya prior to 1882. Only in the census of that year had the population been enumerated on a single date. The second census was taken in 1897 and since that date Egypt has carried out a systematic enumeration every ten years (1907, 1917, 1927, 1937). Unfortunately we have to limit ourselves in most cases to the first five censuses. The results of the last census have not yet been published and, owing to the vast amount of calculations required, we could not get from the Statistical Department more than the preliminary total results of different districts.<sup>4</sup>

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<sup>3</sup>This aspect of the problem has aroused interest among eugenicists and students of population in the recent years. The prevailing idea attributes that differential fertility in the main to more deliberate family limitation in some classes and groups than others. Information is still required concerning the natural endowment of different groups. See

- (a) Sanger, Mrs. Margaret. Proceedings of the World Population Conference, 1927 (papers by Carr-Saunders, March, Grotjahn, etc.)
- (b) Pitt-Rivers, G.H. Problems of Population, 1932. (Papers by Notestein, Hankins, etc.)
- (c) Phelps, H.A. Principles and Laws of Sociology, 1936, pp. 202-203.

<sup>4</sup>Since the completion of the present monograph, some results of the 1937 census have been published. It was not possible to include these results in the text, but all additional information has been given in tabular form in Appendix II.

It may be noticed that the census in Egypt is based upon the de-facto (la population de fait) and not the de-jure (la population de droit) method.<sup>5</sup> Theoretically, it would be preferable to obtain the de-jure population but practically an attempt to do this might and probably would involve more inaccuracies than those resulting from the de-facto method.<sup>6</sup> Actually in such a settled population as that of Sharqiya with no significant seasonal migration and in as much as the census enumeration takes place at a normal time of the year, it is most probable that the two populations do not differ significantly.<sup>7</sup> The difference (if there is any) between the results of the two methods may have some effect on the figures for death rates, which are to a certain extent distributed according to permanent residence; but even in this case, the difference, according to the census of 1927, is "insignificant and may be neglected in practice."<sup>8</sup>

In a country like Egypt, with a high percentage of illiteracy, with long periods of oppression, forced labour and ruthless conscription and with some peculiar social customs, people still look on the census operations with great apathy and much suspicion. They naturally lose sight of the solidarity of public and private interests and see only one side of the usefulness of the census, i.e. its service to the government.<sup>9</sup> Such an attitude must have affected the returns of all censuses and it will not be difficult to realize this fact in discussing the population trend, the marital status and the distribution of population by sex and age.

But the technical side of census-taking, the way in which it had been carried out, the time chosen for enumeration and the material tabulated and published cast grave doubts on the accuracy of some of the census results especially in its first stages. The absence of continuity, for instance, makes it difficult, sometimes impossible, to accomplish a satisfactory comparative study of some of the most

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<sup>5</sup> The de-facto population consists of all present in a given district at a given moment. The de-jure population consists of all usually resident in the district, including those temporarily absent and excluding those only momentarily present.

Bowley, Arthur L. Elements of Statistics 1920, p.25.

<sup>6</sup> Newsholme, Sir Arthur. op.cit pp.29-30.

<sup>7</sup> The de-facto method may be responsible for the great increase of the population of the chief town of Zagazig in the Census of 1897 in contrast with the decrease of the population in the Census of 1907 (See p. 16). The former Census coincided with the annual fair (Mawlad) of one of the Saints buried in Zagazig, when the town was visited by great numbers of people from different parts of the country. See: Sabri, El-Sayyid. Analysis of the Census Results in Egypt (in Arabic), p.209.

<sup>8</sup> Population Census of Egypt, 1927 Part I, p.6.

<sup>9</sup> Census of Egypt, 1917, Vol.II, p.xiii.

important social aspects. The numbers of rooms occupied, for example, were tabulated only in the census of 1917 and therefore the condition of housing and the amount of crowding cannot be precisely estimated. Moreover, prior to the census of 1917, the personal schedule was adopted. That implied the necessity of neglecting all details concerning "the very important question of the family's accommodation and composition".

As regards the date of enumeration it is extremely important that the day should correspond to the time when the population is in its normal status. In most cases this essential rule was wisely followed but in some other cases the time chosen was the least suitable for such an operation. The census of 1882, for instance, was taken at a time when the country was in a very disturbed condition, so that its results cannot be regarded as reliable. Boinet Bey, the man responsible for this census, emphasises the fact that the public did not show any antagonism towards enumeration but on the contrary welcomed the census. We, however, find it most difficult to accept the statement since the time could hardly have been more badly chosen for far reaching operations like the census: early in the preceding year a military revolt had been in progress, in January 1882 the Governments of Britain and France presented their joint note to the Khedive, Alexandria was bombed in July of the same year and the Battle of Tell-El-Kibir was fought in September.

The effect of the last war on the returns of the 1917 census must also be taken into account. Not a few people had objected to the taking of the census and, at the date of enumeration, the demand for labour by the military authorities caused the temporary emigration of a great number of Egyptian labourers. This, however, had been accounted for by the regular enumeration of those men and the data for them were easily distributed afterwards throughout the whole country. (10)

One may add to the above remarks the shifting of the day of enumeration from census to census. Owing to the movement of the Moslem lunar calendar eleven days forward every year, and since it is essential to avoid taking the census during the fasting month of Ramadan or when people are celebrating their religious feasts, it has become practically impossible to take the census on or near the same day each time. (11) This factor, however, can be guarded against by adjusting the returns to a fixed date, when strict accuracy is needed.

Furthermore there may be some vagueness and ambiguity in the terms used in the schedules. If the questions were to be put only to educated and methodical persons, doubtless a full account could be given of many aspects; but the peculiarity of the census is that it is universal and the questions must be such

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(10) Census of Egypt, 1917, Vol. II, p. x.

(11) The census of 1927, for example, should have taken place about the 7th of March, but - quoting from the census report - "seeing that the first of Ramadan fell on March 5th, it was necessary that the arrangements for taking the census up to the return of the filled up Schedules should take place before that day." (Census of Egypt, 1927, p. 6)

that the least educated will be able to answer. This fact is of special importance in a country like Egypt. On the one hand we are dealing with a more or less uneducated mass of people, whose experiences are very limited and whose need of extremely simple and clear questions cannot be exaggerated. On the other hand, one must bear in mind that census operations in Egypt are carried out by petty officials and semi-illiterate agents, who are liable to make grave mistakes if the wording of the schedules is not plain.

It is true that census-taking in Egypt has developed immensely since 1882. Modern counting and tabulating machines (used since 1917) have eliminated, to a great extent, the errors that creep into the tables. Much more care has been given to the choice of the census agents and the checking of their work. Active propaganda precedes the census operation and no effort is spared to secure as accurate information as is possible. But such progress is in itself a source of inaccuracy in the comparative aspect of the study. The testing of the accuracy of a census is difficult because there is no standard more trustworthy by which its results can be measured. We may sometimes discredit a census for the inconsistencies between its different results or for the divergences between its figures and those of earlier or later enumerations. But when it comes to the question of estimating the degree of inaccuracy, it becomes impossible to make a reliable estimate which will enable us to adjust the returns given in the different stages of a still progressing census.

#### VITAL STATISTICS:

The second source of our demographic study of Sharqiya is the statistics given in the annual records of births, marriages and deaths. Such statistics are based on continuous registration and their accuracy, therefore, depends in the first place on the completeness of registration. For obvious reasons marriage records are far more accurate and complete than are birth or death records. Marriage in Egypt becomes valid only through registration, and for the legal right of inheritance we are almost sure that marriage returns are accurate.

Birth registration, on the contrary, is far from satisfactory. A significant percentage of the total births is not reported, and despite the great improvement in birth registration, since it started, "one high official, as recently as 1933, estimated that percentage as at least 10, while several physicians would place the figure even higher." (12) It is not the indifference of the public to registration that explains this phenomenon. The main reason is the strong desire to escape conscription; and as long as exemption is only secured - except in some special cases - by the payment of an exemption tax beyond the means of a great number of the fallahen, the easiest way obviously is not to report the birth of the child. It is true that compulsory registration of births - as well as deaths - was set up in Egypt in 1912, but the notifica-

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(12) Cleland, William Wendell. The Population Problem in Egypt, 1936, p.23.

tion of births in most cases is left to an ignorant midwife.<sup>(13)</sup> The significance of the foregoing statement will be clearer when we compare the birth-rate in those parts of Sharqiya, where birth registration is carried out by Health Offices, with the birth-rate in the other localities of the province, where such offices do not exist. In the latter parts, with more rural characteristics, higher birth-rate was expected. Available statistics, however, show an opposite trend and the inaccuracy of birth registration is believed to be the main factor for such an unexpected tendency. Furthermore one has to remember that what is called the Arab element in the Egyptian population, which is very strong in Sharqiya, is more apathetic - if not hostile - to birth registration. When it was made compulsory that all Arabs born should be registered, the official Sheikhs of the Hanadi tribes of the province resigned as a protest against what they considered a "grave violation of the rights of the Arabs" !<sup>(14)</sup>

But supposing that the actual state of registration gives us a rather reliable basis for the demographic study, do the published birth records help us to present a satisfactory picture of the fertility of the population of Sharqiya? The crude birth-rate is easily calculated by referring the births which occur in any year to the total population and expressing the result per 1,000 of the population. Such a crude rate is now considered an imperfect measure of fertility and inadequate means of gauging the vitality of a given community. The gross reproduction rate, as elaborated by Kuczynski, is the best simple figure to convey a measure of fertility. But its computation presupposes the knowledge of the births by age of mothers.<sup>(15)</sup> In Egyptian birth records the age of the mother is not ascertained. It is, therefore, impossible to know the real trend of fertility and one must, for the time being, be content with the crude rate with its great liability to serious mistakes.<sup>(16)</sup> Besides, we have to remember the grave doubts which are cast on the registration of what are called the "still-births." Owing to the prevailing idea about morality in rural Egypt in general and in Arabized localities in particular, the registered still-births do not seem to represent more than a very small fraction of the actual numbers. And

(13) Kamal, A.M. A Statistical Review of Births and Deaths of Children in the 19 Principal Towns of Egypt since 1886, p.3 (quoted by Cleland p.23).

(14) Personal communication given by one of the Sheikhs of Al-Hanadi during the field study.

(15) On this see Kuczynski, Robert R, The Measurement of Population Growth, 1935, pp.120-122.

(16) The so-called "standardised rate", which is supposed to give a more accurate idea about fertility than the crude rate, is also based on the knowledge of the age-groups at births: See

(a) Newsholme, Sir Arthur. The Elements of Vital Statistics, 1923, p.86.

(b) Kuczynski, R.R. The Measurement of Population Growth. Chapter IV.

when it comes to the specific meaning of the term, there is much vagueness since it is sometimes confused with miscarriage and abortion. Some Public Health Reports - according to Cleland - "list for government welfare centres, besides still-births at full term, the record of premature still-births for the first three months, second three months and after six months. In the general reports it is not clear what kind of still-birth is meant." (17)

As regards the death registration, it is believed that it is far more accurate than birth registration. In accordance with Decree No.23, promulgated August 11, 1912, notification of deaths of Egyptians and foreigners alike is compulsory. Interment in Egypt, except for infants in the very remote localities, requires an official permit and in most cases the public raises no difficulties in carrying out the registration. Secret interments, however, are by no means rare and some thousand people are known to be buried secretly every year. (18) The incompleteness of death reports is revealed by the comparison of the natural increase of the population, as calculated from the difference between the reported births and deaths in a certain decennial period, with the difference between the returns given in the two censuses for the same period. The figure in the former case is usually higher. Such a tendency cannot be attributed to more recorded births and the reason for that divergence is to be sought, partly or wholly, in the inaccuracy of death returns. (19) The inaccuracy of death registration is more marked in villages than in towns. A comparison of the death-rate in purely rural localities with the rate in more urban centres shows that it is lower in the former than in the latter. The forces of death are undoubtedly more active in rural Egypt, with its unhealthy conditions and with the complete ignorance of the fallahen of the very elements of hygiene. The comparatively higher death-rate in towns can be attributed only to more accurate registration in such places, where health offices exist and where the figures are more reliable. (20)

Whether the population of Sharqiya is replacing itself or not, cannot be stated definitely so long as we have no means of ascertaining the balance of births and deaths in the province. We therefore have to confine our study to the vital index and the ratios of deaths to births. This may not be sufficient to allow a judgment upon vitality, (21) but the natural increase or decrease of

(17) Cleland, William Wendell, op.cit. p.25.

(18) During three recent years such secret interments were estimated by the authorities concerned as high as 30,000. See: Sabri, El-Sayyid. op. cit. p.4.

(19) Ibid. p.4.

(20) This is more significant in the registration of infantile mortality. See Annual Report of the Department of Public Health for 1926 (In Arabic) p.15.

(21) Some eminent writers still consider the ratios of deaths to births the best gauge of vitality. The well-known American biologist R. Pearl, for instance, states that such a ratio "measures more effectively than any other demographic function yet devised the essential biological fitness of a population, in the sense of organic evolution." Quoted Kuczynski, op.cit. pp.200-201 from

Pearl, Raymond. Introduction to Medical Biometry and Statistics, 1923, pp.168-169.

a population is an important fact in gauging the actual position of the community. It is of special interest to the socio-economic phase of the population problem in Egypt.

The foregoing appraisal of our sources of information does not allow us to make final conclusions, since most of the important demographic questions are to be answered by a non liquet. If this study has any merits at all, they consist in representing a picture of the actual state of our knowledge of the demographic situation in Sharqiya.



## II ANALYSIS OF THE MAIN DEMOGRAPHIC FEATURES

### GROWTH OF POPULATION:

The earliest available estimate of the population of Sharqiya is that of 1846. This estimate, which was based on a census of houses, reported the population of the province proper as 391,559.<sup>(22)</sup> In the preliminary results of the latest census of 1937, the total population of Sharqiya amounts to 1,119,456.<sup>(23)</sup> Thus, in about ninety years there is an increase of population of 727,897 or 185.9% (more than 2% per annum).

Table I gives the population estimates and the intercensal increase for the whole province during the period 1846-1937. It is easy to notice the rapid growth of population, which has almost tripled in less than a century. Neither external nor internal immigration seems to be an important factor in such a rapid growth. The number of foreigners in Sharqiya is relatively very small and the amount of increase of this element is insignificant.

T A B L E I.

General Trend of Population in Sharqiya, 1846-1937 (24)

Date	Population	Intercensal Increase		Remarks
		Amount	Average Rate % per annum.	
1846, Dec. 16	391,559	-	-	
1872, March 11	401,287	9,728	0.10 (appr.)	Doubtful figures
1882, May 3	443,702	42,415	1.41 ( " )	
1897, June 1	728,349	284,647	4.3	
1907, April 29	855,981	127,632	1.8)	
1917, March 7	955,497	99,516	1.2)	More accurate
1927, Feb. 19	1,016,912	61,415	0.6)	
1937,	1,119,456	102,544	1.0)	

<sup>22</sup> Amici, F. Essai de Statistique Générale de L'Egypte, Cairo, 1879, Vol. I, footnote p.7.

<sup>23</sup> Annuaire Statistique 1937 - 1938.

<sup>24</sup> The figures for 1846 and 1872 are taken from Amici, F. op. cit pp.7-9, Vol.I but the average rates of increase for 1872 and 1882 have been calculated by the writer. All figures for 1897, 1907, 1917 and 1927 are taken from the Population Census of Egypt, 1927, Part I, Table VII. The figures for 1937 are based on the preliminary results as given in the Annuaire Statistique d'Egypte, 1937-38.

Table II illustrates this latter fact. It shows the numerical position of the foreign element in proportion to the whole population of the province. There was a steady increase of this element at the end of the nineteenth and at the beginning of the twentieth centuries, owing to the great economic opportunities for foreign capital and European activity. Since 1907 the number of foreigners has enormously decreased, partly because of less economic profits and partly because most of the Ottomans preferred to be local subjects under the new political status of Egypt.

T A B L E II.

Position of the Foreign Element in the Population of Sharqiya<sup>(25)</sup>

Date of the Census	Number of Foreigners	% of the whole Population	Intercensal Increase or decrease	
			Number	% of the whole increase.
1882	1,804	0.41	-	-
1897	4,029	0.55	+ 2,225	0.78
1907	5,338	0.62	+ 1,309	1.03
1917	3,793	0.40	- 1,545	-
1927	2,657	0.27	- 1,136	-

As regards internal immigration, nothing definite can be said about the extent and prevalence of such a phenomenon, since no data are available prior to 1907. The wide scope of reclamation in such districts as Tell-El-Kibir and the northern parts of Kafr Saqr might have attracted many families from the more crowded provinces of Egypt, but most of the immigrants seem to have come from the more densely populated districts of Sharqiya. The figures given in the census of 1927 even suggest that Sharqiya is not now gaining from the exchange of population which is taking place between the different parts of the country. There is a net gain of 15,666 in the census of 1917.

(25) The number of foreigners is taken from the different censuses. It was necessary sometimes to adjust the figures given in some censuses. In 1897, for instance, the number of foreigners in Zagazig (Bandar) was added to the figure given for the districts of the province. In 1907 the Badw and the Sudanese were grouped as Egyptians and not as foreigners. In calculating the percentages the figures given in Table I were taken as bases.

T A B L E    I I I .

## Movement of Immigration and Emigration in Sharqiya. (26)

Date of Census	Immigrants	Emigrants	Net Loss or Gain
1917	58,778	43,112	+ 15,666
1927	48,583	51,187	- 2,604

Nevertheless, one ought to remember that Sharqiya was more affected by the last war than most parts of Egypt. This might have increased the demand for labourers, who were enumerated in the province and therefore raised the number of immigrants.

It is now evident that the reasons for the rapid increase of the population of the province are to be sought in the great reproductive power of the people of Sharqiya, in some technical fault in the process of enumeration or in both these factors. There is sufficient evidence that the economic development of modern Egypt, its social progress and the great efforts that have been made to improve the hygienic conditions in the country, have raised the birth-rate and lowered the death-rate. A significant natural increase is obviously expected and the rapid growth of the population can easily be understood. This aspect of the question may be discussed in detail when dealing with births and deaths. We need now to examine the trend of population in order to see whether there may be any abnormality which needs explanation. The value of the figures for 1846 and 1872 is very doubtful. They were not the returns of real censuses, no detailed tables were published for these estimates and no information is given as to the way in which enumeration was carried out. One, therefore, is obliged to limit the study to the figures given in the different censuses. Thus we start from 1882.

The study of the figures given in table I for the average rates of intercensal increase shows that the highest rate was attained during the fifteen years following 1882, with an increase of 4.3% per annum. During the following three decades (1897 - 1927) the increase continued at much lower rates, which were particularly marked in the decade after 1917 with an increase of 0.6% per annum. The preliminary results of the 1937 census give a rather higher rate of increase (1.0% per annum) for the ten years that followed 1927.

It may firstly be asked what were the causes that had led to the marked reduction in the annual rate of increase after 1897? The director general of the census of 1907 raised a similar question when dealing with the movement of population in the whole of Egypt. In his opinion, "the reply to this question is twofold. The country has been developing its resources enormously but during the fifteen years that followed the British occupation its advance was pro-

<sup>26</sup> The figures are taken from the Census of Egypt, 1917, Vol. II, Table XVIII, and Population Census, 1927, Part I, Table X. One may notice that the figure given in the Census of 1927 for total immigrants to Sharqiya in 1917 is 69,844 instead of 58,778, which is the figure given in 1917 Census.

bably even more rapid and it is quite possible that the larger increase during the earlier period is really a reflection of the abnormal conditions that followed on the occupation, so that a certain slackening in growth was to be expected."<sup>(27)</sup> This may be helpful in explaining the low rate of the increase of the population of Sharqiya after 1907, but not prior to this date. The marked influx of foreigners to the province as revealed in the returns of the 1907 census<sup>(28)</sup> shows that until this date at least the economic development of Sharqiya had been steadily progressing. We, therefore, prefer to be rather cautious in applying this explanation in the case of Sharqiya, but agree completely with the director general that "it is probable that the very large increase between 1882 and 1897 was more apparent than real."<sup>(29)</sup> The conditions under which the census of 1882 had been accomplished have already been discussed and all authorities are unanimous in regarding that first census of Egypt as an undercount. No exceptionally favourable circumstances had prevailed during the years preceding the census taken in 1897. On the contrary cholera spread over Egypt during the years 1895 and 1896, and the effect of such an epidemic on the death-rate cannot be overlooked, especially at a time when neither precautionary measures nor effective remedies were possible. If, therefore, authorities on vital statistics consider an increase rate of 2.4% per annum for the whole country in the period between 1882-1897 beyond the reproductive power of the Egyptian nation, one may be justified in doubting the accuracy of such a high rate as 4.3% per annum for Sharqiya during the same period. Furthermore, the enumeration of the so-called Arabs in the province must be taken into account. As has already been stated this element, which is very strong in the east and north-east parts of Sharqiya, was extremely hostile to the 1882 census, and the Badw were enumerated separately even where they were living amongst the fallaheen. The attitude of the Arabs must have changed enormously since the first census, and great numbers of the Badw gradually became fallaheen. The returns of the census of 1897 for a province like Sharqiya were undoubtedly influenced by those local factors, and the apparently high rate of increase as revealed in that census was partly due to them. The comparison of the average rate of increase for the period 1882-1897 in the different districts of Sharqiya throws much light on the foregoing statement. Faqus, with its strong Arab element and where great

T A B L E IV.

Percentage Average Rate of Increase (per annum) in Different Districts of Sharqiya<sup>(30)</sup>

Period	Faqus	Belbeis	Hihya	K. Saqr	M. El-Qamh	Zagazig (M)	Sharqiya
1882-1897	7.4	3.1	4.6	4.9	3.2	4.2	4.3

<sup>27</sup>Census of Egypt, 1907, p.23.

<sup>28</sup>See Table II.

<sup>29</sup>Census of Egypt, 1907, p.23.

<sup>30</sup>Population Census of Egypt, 1927, Part I. Table VII.

numbers of Badw had recently settled, gives the highest rate of increase (7.4% per annum), whereas other districts such as M. El-Qamh and Belbeis, with comparatively limited opportunities for such new settlers, give average rates of only 3.2% and 3.1% per annum respectively. A detailed study of the average rates of increase in Hihya, K.Saqr and Zagazig (M) will show that the higher rates are almost confined to the eastern localities, which have always been more accessible to the Badw.

The foregoing discussion, however, should not imply that the growing natural increase of the population of Sharqiya between 1882 and 1897 has been overlooked. All that we wish to emphasise is the impossibility of attributing such a high average rate of increase as 4.3% per annum solely to the annual surplus of births over deaths. Unfortunately Egypt had no registration of births and deaths prior to 1906, but the trend of fertility and mortality as revealed in the recent available statistics, makes an annual natural increase of 43 per thousand unimaginable. It is safer, therefore, to consider the 1882 census as disqualified for comparison with the later censuses and to start the comparative demographic analysis from the census of 1897.

Returning again to the trend of population in the province, the contrast between the rather marked decline of the annual rate during the decade following 1917 and the rise of the rate in the following decade is somewhat obscure. It seems probable that the decrease of rate in the former decade was not normal. The number of the births was comparatively smaller during the years of the last war, owing to the decrease in the number of marriages, on the one hand, and to the absence of not a small number of married labourers from their villages on the other hand. Moreover the spread of the influenza epidemic in the years 1918 and 1919 must have raised the death-rate to a significant degree. (31) The economic depression after the last war might also have affected the population more severely during the years 1919 to 1927 than it did in the decade following 1927. If, therefore, the low rate of increase, as revealed in the census of 1927, is examined in the light of the above discussion, one may assume that the decline of the annual increase of population has slackened in the last years. The reasons for this phenomenon are not sufficiently clear. The improvement of the sanitary conditions, the relatively higher social standard of the people, and the decrease of infantile mortality may be the outstanding factors underlying this change. More adequate registration of births naturally increases the net gain of population, but in considering this factor, one has to remember that there is also more accuracy in the death records, which usually minimizes the significance of such a net gain.

For the comparative study of population trends in Sharqiya and the whole of Egypt, Table V has been prepared. The common feature in both trends is the

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<sup>31</sup>Annual Report of The Department of Health, 1926 p.8. (in Arabic)

TABLE V.

Average Rate of Increase for the Populations of Sharqiya and whole Egypt (1882 - 1937). (32)

District	Intercensal Increase % Average Rate per Annum					% Increase
	1882-1897	1897-1907	1907-1917	1917-1927	1927-1937	1882-1937
Sharqiya	4.3	1.8	1.2	0.6	1.0	152.3
Egypt	2.9	1.6	1.4	1.1	1.2	137.2

enormous increase in such a short period. The contribution of the period between 1882 and 1897 is marked but the real significance of such a contribution has already been doubted. The increase of population in the fifty-five years, 1882-1937, seems to have been relatively greater in Sharqiya than in the whole country. This fact is easily understood when one remembers the foregoing discussion of the settlement of many Badw in Sharqiya and when it is known that Sharqiya has been one of the few Egyptian provinces having wide areas under reclamation and great opportunities for economic enterprise. It is noticed, however, that since 1907 the average rate of increase for the population of Sharqiya has fallen below that of the whole of Egypt, although the difference in most cases is rather small. This change may be taken to indicate that the economic potentialities of the province have lately fallen behind the general economic development of the country. The lands under reclamation in some other provinces are more attractive and more remunerative. The increased acreage in those parts of Upper Egypt that have been recently brought under perennial irrigation has checked the emigration from these localities to Lower Egypt. The rapid growth of the chief urban centres has greatly influenced the movement of the rural population. The above-mentioned factors may explain, partly at least, why Sharqiya seems now to be losing in the process of exchange between its population and the inhabitants of other parts of Egypt. (33)

The study of Table VII indicates how the total intercensal increase is distributed over the different districts of Sharqiya. It is easily noticed that every district shares in the general rise. The following table, however, shows that the amount of increase varies enormously from district to district. Comparing the returns given for each district in the censuses of 1897 and 1937 the districts of Sharqiya may be grouped as follows:

1. Districts with an increase of more than 60% over the total population of

<sup>32</sup>The figures for 1882, 1897, 1907, 1917, 1927 are taken from the Population Census of Egypt, 1927, Part I, Table VII. The figures for 1937 are quoted from the *Annuaire Statistique d'Egypte* 1937-1938.

<sup>33</sup>See Table III.

1897. It is interesting to note that the rate of increase rises northwards and

T A B L E VI.

Growth of Population in Different Districts  
1897 - 1937.

District	Population		Amount of Increase	% of Increase
	1897	1937		
Faqus.	90,250	193,035	102,785	113.89
K. Saqr.	82,599	135,241	52,642	63.49
Zagazig (B.)	38,434	59,321	20,887	54.35
" (M.)	176,692	268,097	91,405	51.73
Belbeis.	109,839	155,921	46,082	41.95
Hihya.	97,838	131,732	33,894	34.64
M.El-Qamh.	132,687	176,109	43,422	32.73
Sharqiya.	728,339	1,119,456	391,117	53.69

north-eastwards in the province. Faqus stands out as having the highest percentage. The explanation for that has already been given.<sup>34</sup> The increase of area under cultivation was greater in Faqus and K.Saqr than in other districts of Sharqiya, and great numbers of immigrants, especially from amongst the Badw, raised the returns of enumeration from year to year.

2. Districts with an increase of less than 40% over the total population of 1897. The lowest percentage of increase is in the south-western part of the province, with its very limited opportunities for any increase of the cultivated land. The western parts of Zagazig district, if examined separately, would have fallen in this category. The eastern parts, on the other hand - with the wide area under reclamation in Tell-El-Kibir and the different localities at the edge of the arable land such as Abu Hammad and El-Qurein - may be classified in the first category.

3. Districts with an increase of 40-60% over the total population of 1897. One may notice that the town of Zagazig, with its less rural characteristics, falls in this category. The growth of this town does not actually show any exceptionally rapid increase of population in any intercensal period. With the exception of the decade following 1917, the average rate of increase for Faqus has always been higher than that of the town of Zagazig. The importance of the chief town as a commercial or industrial centre is comparatively limited. Other urban centres, such as Cairo, Suez, Ismailia and Port Said, are easily accessible and far more attractive to migrants.

T A B L E VII.

Total Population During the Last Six Censuses (1882-1937) and Changes in Figures by District

(35)

DISTRICT	1897			1907			1917			1927			1937		
	1882	Number	Inter-censal	Number	Inter-censal	Number	Inter-censal	Number	Inter-censal	Number	Inter-censal	Number	Inter-censal	Number	
			Increase or Decrease (-) % rate per annum		Increase or Decrease (-) % rate per annum		Increase or Decrease (-) % rate per annum		Increase or Decrease (-) % rate per annum		Increase or Decrease (-) % rate per annum				
Belbeis	75,111	109,839	34,728 3.1	125,716	15,877 1.4	138,088	12,370 1.0	142,384	4,298 0.3	155,921	13,537 1.0				
Faqus.	42,878	90,250	47,373 7.4	124,684	34,434 5.8	145,207	20,523 1.6	162,787	17,580 1.2	193,035	30,248 1.3				
Hibya.	57,930	97,848	39,918 4.6	110,164	12,316 1.3	120,554	10,390 0.9	124,672	4,118 0.3	131,732	7,060 0.7				
K. Saqr.	47,755	82,599	34,844 4.9	106,556	25,957 2.9	118,015	11,459 1.1	132,458	14,443 1.2	135,241	2,783 1.2				
M.El-Qamh.	89,763	132,687	42,924 3.2	148,767	16,080 1.2	164,472	15,705 1.1	166,565	2,093 0.1	176,109	9,544 0.6				
Zagazig (B)	21,454	38,434	16,980 5.2	37,815 - 619 -0.2		42,942	5,127 1.4	52,839	9,897 2.3	59,321	6,482 1.2				
Zagazig (M)	106,814	176,692	67,878 4.2	202,279	25,587 1.4	226,221	23,942 1.2	235,207	8,988 0.4	268,097	32,890 1.2				
Sharqiya	443,705	728,349	284,644 4.3	855,981	127,632 1.8	955,497	99,516 1.2	1,016,912	61,415 0.6	1,119,456	102,544 1.0				

(35) This table is based on figures given in the 'Population Census, 1927 Part I, Table VII' and in 'Annuaire Statistique, 1937-1938.



The general trend of population in the different districts is, on the whole, similar to that of the whole province. The district of K. Saqr, however, does not seem to have been affected either by the last war or by the influenza epidemic of 1918-1919. It has maintained a rather constant rate of increase (1.2% per annum) in the three decades following 1907. The only trend that shows marked deviation from the general trend is that of the town of Zagazig. The return of the 1907 census compared with that of 1897 indicates a decrease of 619 in the population of the town. The explanation of this feature has already been given in the first section of this study.<sup>(36)</sup> Furthermore, one may notice that the average rate of increase for the decade following 1927 had dropped from 2.3% to 1.2% per annum, while it showed an opposite tendency in almost all other parts of the province. The factors underlying this latter feature are obscure. Nevertheless, such a tendency supports the foregoing discussion about the significance of this chief town as an urban centre.

### Crude Birth and Death-Rates.

The very limited value of crude birth and death-rates in gauging fertility and mortality has been proved by recent demographic researches. Reference has already been made to the impossibility of calculating the 'net reproduction rate', which is now considered the only accurate gauge for measuring the balance of births and deaths. However, tables VIII and IX may serve a general purpose by indicating the actual position of births and deaths in Sharqiya during the last twenty-two years. Further information will still be needed to understand the real forces determining what Raymond Pearl calls "the essential biological fitness of the population, in the sense of organic evolution."

The most striking feature revealed by the figures is the extremely high birth as well as high death-rates. The association between these two phenomena is universally<sup>(37)</sup> observed but, so far, the precise nature of such an association is not clear. In the case of Sharqiya it may be that the high birth-rate renders the care of children by the mother more difficult, a fact which is supported by the extremely high rate of infantile mortality in the province.

There has been a rather marked fluctuation in the birth-rate in Sharqiya, though it has been more or less constant in the last decade. The effect of the last war may account for the comparatively lower rates in 1916 - 1919, whereas more accurate birth registration seems to have been the primary factor in raising the figure of the birth-rate since 1920. This becomes more understandable when it is remembered that the marriage law of 1923 raised the age of marriage to 16 and 18 for females and males respectively. The distribution of wives by age may throw some light on the trend of the birth-rate because it indicates the proportion of married women of childbearing age. But one has to bear in mind the fact that women between 15 and 45 are not all equally fertile. No data

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<sup>36</sup>Footnote 7, P.3

<sup>37</sup>Carr-Saunders, A.M. "Population", in Encyclopaedia Britannica, 13th Edition.

bearing upon these points are available for the people of Sharqiya.

The effect of the influenza epidemic is markedly evident in the returns for deaths in 1918. Despite the steady improvement in sanitary conditions comparatively higher death-rates are noticed during 1932-1936, a feature which has already been attributed to the progressive recording of deaths. This fact is clearly proved by the study of local death-rates. On the one hand the town of Zagazig (Zagazig B.) stands out as having the highest death-rate in the province; on the other Faqus shows a markedly low death-rate. The former feature is undoubtedly due to the existence of a government health office in the chief town which carries out the death registration more efficiently.<sup>38</sup> The low rate for Faqus is influenced by the strong Badw and semi-Badw elements living in the district. Those elements have always been indifferent, sometimes antagonistic, to the registration of deaths. This attitude seems to have undergone a significant change, which can easily be noticed in death returns for more recent years.

As to the causes of death in Sharqiya, nothing definite can be stated, because deaths are not classified according to their causes except where death registration is carried out by health offices. In such localities diarrhoea, enteritis, bronchitis and senility are the most prevalent diseases.<sup>39</sup>

It may be noticed that the birth-rate is slightly higher in the town of Zagazig than in other rural parts of the province. More accurate birth recording can partly account for this feature but the difference in age distribution<sup>40</sup> must be taken into account. When it is possible to adjust the birth-rates to age distribution of the married proportion of the population in both urban and rural centres, it is likely that the corrected rate in the town will fall below that of the rural<sup>41</sup> districts.

<sup>38</sup> It may be argued that town life, with less open air and more crowded population, is bound to raise the death-rate, but one should not forget the horrible sanitary conditions prevailing in the Egyptian village.

<sup>39</sup> Annual Report on the Work of the Ministry of Public Health for 1936. pp.18 - 20.

<sup>40</sup> See Table XIV.

<sup>41</sup> The high birth-rate in towns is partly created by the practice of crediting all births in a maternity hospital to the town in which the hospital is located rather than to the communities from which the patients have come.

T A B L E VIII.

Birth and Death-Rates in Sharqiya for the Period 1916-1937.<sup>42</sup> (per 1,000 population).

Year	Births	Average Birth-Rate	Deaths	Average Death-Rate	Excess of Births over Deaths.	Average increase
1916	36.5	36.2	25.2	30.5	11.3	5.7
1917	36.0		30.2		5.8	
1918	34.7		42.9		-8.2	
1919	35.0		27.0		8.0	
1920	39.0		27.4		11.6	
1921	39.4	39.5	24.4	23.5	15.0	16.0
1922	38.0		23.2		14.8	
1923	38.9		24.7		14.2	
1924	40.9		22.8		18.1	
1925	40.1		22.5		17.6	
1926	39.7	41.1	23.5	24.2	16.2	16.9
1927	38.7		24.4		14.3	
1928	41.8		25.4		16.4	
1929	41.8		25.1		16.7	
1930	43.6		22.7		20.9	
1931	42.0	41.1	24.5	26.9	17.5	14.2
1932	41.3		29.4		11.9	
1933	42.6		27.6		15.0	
1934	40.0		27.1		12.9	
1935	39.6		25.9		13.7	
1936	41.3		30.3		11.0	
1937	41.6		26.7		14.9	

<sup>42</sup>Based on figures given in different annual reports about the annual return of births and deaths in Sharqiya (Statistical Department Publications, Cairo).

## TABLE IX.

(43)  
Birth and Death-Rates in Different Districts of Sharqiya in 1920, 1925, 1930 and 1935.  
(per 1,000 population)

DISTRICT	1920			1925			1930			1935		
	Births	Deaths	Excess of Births	Births	Deaths	Excess of Births	Births	Deaths	Excess of Births	Births	Deaths	Excess of Births
Belbeis.	38.7	30.2	8.5	44.1	24.8	19.3	46.7	25.7	21.0	41.9	27.9	14.0
Faqus.	38.3	18.2	20.1	36.9	18.6	18.3	38.8	19.1	19.7	37.3	22.4	14.9
Hihya.	39.8	27.6	12.2	39.0	24.3	14.7	42.0	24.2	17.8	38.1	23.4	14.7
Kafr Seqr.	35.9	22.7	13.2	40.8	23.1	17.7	43.3	22.3	21.0	35.2	25.6	9.6
M. El-Qamh.	40.6	31.1	9.5	40.7	20.2	20.5	44.1	24.1	20.0	40.7	28.5	12.2
Zagazig (B.)	42.7	37.6	5.1	41.5	29.4	12.1	51.0	30.8	20.2	43.8	28.3	15.5
" (M.)	39.1	29.5	19.6	39.3	22.8	16.5	44.4	22.9	21.5	42.1	26.5	15.6
Sharqiya.	39.0	27.4	11.6	40.1	22.5	17.6	43.6	22.7	20.9	39.6	25.9	13.7

(43) Based on figures given in different annual reports about the annual return of births and deaths in different districts of Sharqiya.

## Distribution of Sex Proportions

The following table gives the numbers of males and females, the deficiency or excess of the former sex and the ratio of females to every 1,000 males as revealed in the returns of the last five censuses of the provinces. With the exception of the 1897 census, females predominate in the population of Sharqiya. There has been a steady rise in the ratio of this sex to the male sex,

Distribution of Males and Females in the Population of Sharqiya in the last Five Censuses 1897-1937

Date of the Census	Males	Females	Excess or Deficiency of Males	Females to 1,000 Males
1897	364,342	364,007	+ 335	999
1907	426,941	429,040	- 2,099	1,005
1917	471,847	483,650	- 11,803	1,025
1927	495,495	521,417	- 25,922	1,053
1937	549,169	570,287	- 21,118	1,038

except in the returns of the 1937 census, where the ratio falls to 1,038 females for 1,000 males as against 1,053 in the 1927 census. It is difficult to explain with certainty the reason for this relative increase of females during the four decades 1897 - 1937. Probably it was due to less reticence in the acknowledgment of the females belonging to the various households.<sup>44</sup>

The difference noticed between the numbers of the two sexes might be due to an excess of female births in the population of Sharqiya. Unfortunately we have no complete birth records for the whole period. Nevertheless, the available returns of births for the two sexes show that there has always been an excess of living male births (Table X). Accepting this as a fact, why, it may be asked, is there an excess of females in Sharqiya? The same feature is noticed in the distribution of sexes in the population of north-western European nations and it is usually attributed to a much higher number of male deaths, either because women are more hardy than men or because the latter are usually more exposed to accidents owing to the nature of their employment. Males are also known to bear a higher proportion to females among still births and "evidence derived from observation upon miscarriage and other sources goes to show that males suffer a disproportionately heavy mortality at a still

<sup>44</sup> This feature was observed by the director general of the 1907 census. See Census of Egypt, 1907. p.91.

earlier stage during pre-natal life."<sup>45</sup>

T A B L E X.

Births and Deaths (per Sex) in Sharqiya in 1934 and 1937.

Year	Births		Deaths	
	Male	Female	Male	Female
1934	23,669	21,626	16,198	14,125
1937	24,003	22,090	16,158	13,373

In Table XI the sex-ratio of the population of Sharqiya is compared with that of the governorates<sup>46</sup> on the one hand and with that of the whole country on the other. In the governorates, although there has been a steady rise in the ratio of females to males, the latter sex is still predominant. Such a feature

T A B L E XI.

Sex-Ratio in Sharqiya, Governorates and Whole Egypt in the Last Five Censuses, 1897-1937.

Locality	Females to 1,000 Males				
	1897	1907	1917	1927	1937
Sharqiya	999	1,005	1,025	1,053	1,038
Governorates	883	889	938	906	956
Egypt	969	992	997	1,009	1,001

is understandable. Immigrants to cities from the country or from abroad are mostly men, and the great numbers of men students and soldiers, who live temporarily in the urban centres, must increase the number of males. As regards

<sup>45</sup>

On this point see:

- (a) Carr-Saunders, A.M. "Population" in Encyclopaedia Britannica, 13th edition.
- (b) " and Jones. A Survey of the Social Structure of England & Wales, 1927, pp.3-4.

<sup>46</sup>

The Governorates are the main urban centres of the Country.

the sex-ratio, Sharqiya, like the rest of Egypt, falls in the same category as European nations. In most countries with non-European populations, males exceed females, and this is sometimes taken to indicate a low standard of civilization. The excess of males in Japan, for instance, is sometimes ascribed to the high toll of female life resulting from their treatment by the men, but <sup>47</sup> the truth is more complex and many socio-economic factors enter into the question. At the same time it should be noticed that in India, which has a deficiency of females, it is estimated that 550-600 women die in child-birth every day.

The sex-ratios in the different districts of Sharqiya are given in Table XII. The town of Zagazig, with more urbanized characteristics, shows a pre-dominance of males over females.

T A B L E XII

Sex-Ratios in Different Districts of Sharqiya in the Last Five Censuses, 1897-1937.<sup>48</sup>

District	Females to 1,000 Males				
	1897	1907	1917	1927	1937
Belbeis	1,022	1,034	1,049	1,080	1,062
Faqus	991	962	997	1,031	1,024
Hihya	990	1,003	1,025	1,064	1,050
K. Saqr	986	999	1,020	1,053	1,034
M. El-Qamh	1,005	1,023	1,028	1,061	1,042
Zagazig (B.)	929	926	945	916	950
" (M.)	1,009	1,017	1,045	1,071	1,050
Sharqiya	999	1,005	1,025	1,053	1,038

Contrary to the general trend in all other parts of the province the sex-ratio of the town has markedly risen since 1927. This may be taken to indicate some slackening in the movement of immigration to the chief town for certain economic reasons. Immigration usually brings more men and therefore any slackening in it is expected to increase the number of females in proportion to that of males.

<sup>47</sup> See Ishii, Ryoichi. Population Pressure and Economic Life in Japan, 1937, pp. 87-88.

<sup>48</sup> All ratios are calculated from figures given in the five censuses.

The study of the figures given in the above table reveals a rather marked diversity in the sex-ratio of the different districts. The proportion of women as compared with the number of men is relatively smaller in the north-eastern part of Sharqiya. Faqus and K. Saqr stand in contrast with the other districts, Belbeis, M. El-Qamh, Hihya and Zagazig (M.). In the case of K. Saqr, one has to remember that the sparsely populated area in the north has attracted many labourers from different localities. Those labourers do not usually bring their wives with them, and the number of males proportionally increases. In Faqus, on the other hand, the new Badw settlers have added enormously to the population of the district. Among those Badw it has always been noticed that the number of men is greater than that of women. The returns of the 1882 census, for instance, show that whereas only 49.3% of the fallaheen of Sharqiya were males, the percentage rises to 55.3 among the Badw of the province.<sup>49</sup> Similar evidence may be drawn from other censuses.<sup>50</sup>

The reason for the fall of the sex-ratio after 1927 in all districts of Sharqiya is rather obscure. One may relate this tendency to the decrease in the number of deaths, a feature which has been marked, especially in the trend of infantile mortality, in the last years. It has already been stated that the predominance of women over men in the population is mainly due to a higher death-rate among males. Therefore, the male sex is expected to gain more than the female sex from any decline in the trend of mortality. However, this is rather doubtful. Many think that a reduction of infantile mortality affects girls more than boys. No final statement, therefore, can be made before accurate statistics of the death rates of the male and female populations of Sharqiya are carefully examined.

#### Distribution of Population by Age:

Perhaps the least reliable data of census returns are those of age distribution. There is a universal tendency for persons below a certain age to understate their age and for persons above a certain age to overstate their age. According to Carr-Saunders, this "may be in general attributed to vanity: the young being proud of their youth and wishing to appear even younger and the aged being proud of their advanced years and wishing to appear even older."<sup>51</sup> But

<sup>49</sup> Recensement Général de L'Egypte, 1882, Vol. I pp. xxii-xxiii.

<sup>50</sup> In the 1897 census there were 958 women for 1,000 men (among the fallaheen) as against 938 women for 1,000 men (among the Badw) See:-

Recensement Général de L'Egypte, 1897 Vol. I p. xiii.

<sup>51</sup> Carr-Saunders, A.M. "Population" in Encyclopaedia Britannica, 13th Edition.



besides such deliberate falsifications for one reason or another, there is the mass ignorance on the subject, especially in a country like Egypt with a high percentage of illiteracy and without birth certificates except where health offices exist. It was not unnatural, therefore, to notice - in the 1907 census-cases 20 years removed from the truth and such data were apparently given in good faith.<sup>52</sup> The application of the tests of accuracy suggested by R. Kuczynski<sup>53</sup> leaves us in full agreement with the director general of the census of 1907 in his assumption that the "data given by age-periods must be regarded rather as specimens of the ideas prevailing concerning the ages of individuals than as a faithful reflection of actual facts."<sup>54</sup> The results of a special count which was made in 1907 of 100,000 male and 100,000 female slips taken at random from two or three districts are remarkable. From the age of 15 and upwards there is a very pronounced tendency to return ages at the "fives" and the "tens".<sup>55</sup> A scrutiny of such figures should cast grave doubts on the accuracy of the returns of age-groups. The degree of inaccuracy, however, does not seem to be as great in the returns for Sharqiya as it is in the returns for the whole country. As remarked by Dr. Cleland, the number of women (all over Egypt) 20 to 29 years old in 1927 exceeds the number 10 to 19 years old in 1917. Likewise the males of the 30 - 39 year group in 1927 exceed by 49,053 the number aged 20 - 29 in 1917.<sup>56</sup> The comparative study of the figures given in the following table does not show such abnormalities in the case of Sharqiya.

Locality	Age-Group	Date	Number	Age-Group	Date	Number	Amount of Loss or gain	
Sharqiya	} F.	10-19	1917	93,772	20-29	1927	86,468	7,304 -
Whole Egypt.		"	"	1,178,790	"	"	1,209,891	31,101 +
Sharqiya	} M.	20-29	"	71,444	30-39	"	68,894	2,550 -
Whole Egypt.		"	"	938,648	"	"	987,701	49,053 +

<sup>52</sup> Census of Egypt, 1907, p.91.

<sup>53</sup> Kuczynski, op. cit. Chapter I.

<sup>54</sup> The Census of Egypt, 1907, p.91.

<sup>55</sup> Ibid, p.29 and Table IX, p.94.

<sup>56</sup> For the discussion of the above point see Cleland, op. cit. pp.16-17.

The inaccuracy of information about age places great limitations on this aspect of the study, which alone can furnish an explanation of many of the phenomena associated with population such as marriage, birth, sickness and death-rates. Nevertheless wider ranges of distribution (i.e. under 20, 20 - 49 and 50 + ) may reduce the probable error and allow us, in some cases, to make less inaccurate statements.

Tables XIV and XIII list the age distribution in two forms: the first divides the population into five or ten-year age groups; the second classifies the population into three main groups, minors, middle-aged and aged. In both tables it was necessary to adjust the figures for 1897, since the ranges chosen in that census for age-groups were not parallel with those of the later censuses.<sup>57</sup> A further limit in the present study of age distribution has arisen from the fact that in the 1907 census no details about this aspect were given for the different provinces.

T A B L E   XIII

Distribution of the Three Functional Age Groups in 1897, 1917, 1927.  
(per 1,000 population.)

Group	1897			1917			1927		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
under 20	503.0	482.8	492.9	504.1	461.8	482.6	509.9	454.6	482.0
20 - 49	398.0	402.6	400.3	373.3	389.5	381.5	380.6	404.7	393.3
50 & over	98.9	114.6	106.7	120.6	146.7	133.8	107.1	137.8	122.8

The outstanding fact which Table XIII reveals is the significant increase of the aged class in the 1917 census at the expense of the young and the middle aged groups. This may be taken to indicate that, as a community, the people of Sharqiya had been, at least so far as years count, more youthful at the end of the last century than they were in 1917 and 1927. Such a tendency becomes clearer when one compares the ratio of the infant class (4 years of age and under) in the 1897 census with that of the 1917 and 1927 censuses. In the former the ratio was 161.7 per 1,000 as compared with 132.5 and 147.6 in 1917 and 1927 respectively (Table XIV). Many factors play a part in making the age distribution in any community what it is. An increase in the birth-rate will increase, and a diminution in the birth-rate will decrease, the proportion of young persons. Immigration causes an influx of young people while emigration has the opposite

<sup>57</sup> For comparative study one, therefore, must allow for some errors in the adjustment of the 1897 census returns. Nevertheless no effort has been spared to make such errors as insignificant as possible.

result. Furthermore, the death-rate is obviously a powerful factor. In the case of the community of Sharqiya immigration and emigration play a very insignificant part and can safely be neglected. As to the effect of the death-rate nothing definite can be stated, not only because in Egypt the death-rate by age has been applied only very recently, but also because of the doubtful value of the death-rate in any community with inadequate death registration. However, the improvement of the sanitary conditions in Egypt and of public hygiene must have lowered the death-rate. But if such a fact can account for the proportional increase of the aged class in the 1917 census as compared with that of the 1897 census, we still have to explain the great decrease in the number of the young class during the period between the two censuses. This may be attributed to a diminution in the birth-rate, but since we have no complete record of the birth-rates for this period, the real reasons for this fact remain obscure.

It may be of interest to compare the age-groups in the censuses of 1917 and 1927. The younger group has remained almost unchanged, but the difference between the old age-groups in the two censuses is rather significant. The "Spanish fever," which spread in Egypt during 1918 and raised the death-rate enormously in that year, may account for that. It was noticed that most of the victims were from among the middle and old age classes.<sup>58</sup> Nothing precise can be said as to the effect of that fever on the different age classes, since deaths by age-groups were not recorded at that time except for some few urban centres in the country.

The sex ratio has been generally discussed in the foregoing pages. Table XIV gives more details bearing upon this ratio in different age-groups. In the three censuses, males outnumber females in the younger group. In most of the groups over 20 years females are in excess, and the older the group the greater in general is the excess of females. The detailed distributions of the two sexes as given in Table XIV are not consistent with the above general tendency as far as the 1897 census is concerned. It is interesting, however, to notice that this variation from such a universal phenomenon becomes gradually insignificant and even completely absent from the later and more accurate censuses (compare the figures of 1927 with those of 1897).

Reference has already been made to the reasons why in normal times women predominate in the population as a whole in spite of the preponderance of boys over girls at birth. The following table shows how the death ratio of the two sexes differs in the three functional age-groups. Deaths are more numerous among males in the younger age-group in general and in the middle age-group in

Distribution of Deaths per sex and Functional Age-Groups in 1934.  
(per 1,000 of deaths)<sup>60</sup>

Sex	Below 20	20-49	50 & over
Males	589.4	178.9	231.7
Females	564.0	126.8	309.2

<sup>58</sup>Sabri, p.95. op. cit.

<sup>59</sup>Based on figures given for "Deaths by Age-Groups and Sex" in Annual Return of Births, Deaths and Infectious Diseases, 1934.

T A B L E   XIV.

DISTRIBUTION OF POPULATION OF SHARQIYA BY AGE GROUPS (1897, 1917 & 1927).  
(PER 1,000 POPULATION.) (59)

Age Groups	1897			1917			1927		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Below one year	159.3	164.1	161.7	14.9	13.5	14.2	33.3	29.9	31.6
1 - 4				117.9	118.8	118.3	116.9	115.0	116.0
5 - 9	157.2	144.8	151.0	139.7	135.6	137.6	133.3	125.2	129.3
10 - 14	110.6	94.2	102.4	231.6	193.9	212.5	126.5	102.7	114.4
15 - 19	75.9	79.7	77.8				99.9	81.8	90.7
20 - 29	162.1	177.5	169.8	151.4	156.7	154.1	152.0	165.8	159.2
30 - 39	142.1	134.8	138.5	133.3	140.6	137.0	139.0	145.2	142.3
40 - 49	93.8	90.3	92.0	88.6	92.2	90.4	89.6	93.7	91.8
50 - 59	50.3	54.5	52.4	56.3	61.9	59.1	51.9	59.7	55.9
60 - 69	27.6	32.0	29.8	34.2	43.5	38.9	31.1	40.8	36.1
70 - 79	13.7	18.5	16.1	18.1	23.6	20.9	15.0	21.7	18.4
80 - 89	5.7	7.6	6.6	8.5	12.9	10.7	6.4	11.3	8.9
90 & over	1.6	2.0	1.8	3.5	4.8	4.22	2.7	4.3	3.5
Not stated	-	-	-	2.0	1.9	2.0	2.3	2.8	2.6

(59) The figures given in this table were calculated from the returns of the 1897, 1917 and 1927 Censuses.

particular. In the old age-group, on the other hand, the death ratio becomes markedly higher among the female sex: 309.2 per 1,000 as against 231.7 per 1,000 among the males. This fact indicates that women usually live longer than men, but such an assumption needs some investigation as to the trend of the average individual age of both sexes in the population of Sharqiya.

T A B L E X V

Average Individual Age in Sharqiya and in the whole country (1897, 1917 & 1927).

Locality	1897			1917			1927		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Sharqiya <sup>61</sup>	23.6	24.4	23.9	25.0	26.6	26.0	24.1	26.2	25.3
Whole <sup>62</sup> Egypt	23.0	22.9	-	25.3	26.1	-	24.8	25.4	-
" " <sup>63</sup>	-	-	24.0	-	-	26.0	-	-	25.7

The outstanding fact which Table XV reveals is the marked rise of the average individual age in 1917 as compared with that of 1897. This rise was gradual and steady during the whole period between the two censuses and must have been the natural result of the great improvement in public health conditions which has been noticed since the beginning of the present century. But such a steady rise in the average individual age did not continue in the intercensal period 1917-1927. On the contrary there was a fall in the trend of about one year in the average individual age of the people of Sharqiya. The "Spanish fever" of 1918 - to which we have already referred - may account for that feature. Its effect was greater on the middle and old age-groups, and inevitably the average age in 1927 became comparatively lower than that of 1917.

Comparing the average individual age of the two sexes one does not fail to notice the marked difference in the case of the population of Sharqiya. Such a difference between the average age of the two sexes is less marked in the Egyptian population as a whole, and it may be of interest to mention that the director general of the 1897 census pointed out that the women of Sharqiya was

<sup>61</sup> Calculated by the writer from the figures given in the 1897, 1917 and 1927 censuses. The averages were obtained by dividing 1,000 into the sum of the figures secured by multiplying the proportion of a thousand by the mid-value of each age-group. The same method was followed by Cleland.

<sup>62</sup> After Sabri, op.cit. p.82.

<sup>63</sup> After Cleland, op. cit. Table B. p.118.

unique among the women of Lower Egypt in her high average age.<sup>(64)</sup> Furthermore, it seems that there has been a steady increase in the difference between the average age of the two sexes in Sharqiya: in 1897 the difference was 1.3 as against 1.6 in 1917 and 2.1 in 1927. This eventually lowers the average age of the male sex in the province if it is compared with the general trend in Egypt. Thus, whereas the average of the male sex of Sharqiya in 1897 was 23.6 as against 23.0 for the male sex of the whole country, it became 25.0 (as against 25.3) and 24.1 (as against 24.8) in 1917 and 1927 respectively.

It remains now to compare the distributions of the major age-groups in the different districts of the province firstly with each other and secondly with that noticed in the population of Sharqiya as a whole.<sup>65</sup> Table XVI is based on the returns of the 1927 census, and the limits for the different major groups agree with those chosen by most writers on demographic questions.<sup>66</sup> Again, there are local differences in age distribution just as there are local differences in sex distribution. Zagazig (B), the urban centre in the province, stands out as having the highest proportion of the middle age group on the one hand and a comparatively smaller number of old people on the other. This may be partly due to the fact that country people usually live longer, but the main reason is to be found in the great number of officials employed by different departments, secondary education students for whom there are no schools in the country and young immigrants, who flock to the town in search for highly paid jobs. As regards the younger group, it seems that there is not much difference between the town and the country, a fact which has also been noticed in other communities.<sup>69</sup>

<sup>64</sup> Recensement Général de L'Egypte, 1897, Vol.I, p.xxi.

<sup>65</sup> Although the distribution of age-groups is given by sex in Table XVI, yet the following discussion is confined to the total population in each age group.

<sup>66</sup> This classification gives a better idea about the people of the working age and the women of child-bearing age. Unfortunately we could not follow it in the other tables because of the different ranges chosen for age-grouping in the different censuses of Egypt.

<sup>69</sup> See for example:  
Carr-Saunders and Jones, op. cit. p.7.

T A B L E XVI

Distribution of the Three Major age-groups by sex in different districts of Sharqiya, in the whole Province and in the Egyptian Population, 1927<sup>67</sup> (per 1,000 population)<sup>68</sup>

Locality	0 - 14 years			15 - 44 years			45 & over		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
Belbeis	406.3	361.0	382.8	437.6	454.4	446.3	153.7	181.9	168.4
Faqus	431.0	398.9	414.7	430.6	440.6	435.7	136.7	158.4	147.7
Hihya	409.4	369.5	388.9	439.1	452.6	446.1	148.8	174.7	162.1
Kafr Saqr.	424.8	379.2	401.5	442.1	455.0	448.7	130.2	162.4	146.7
M. El-Qamh.	398.6	363.3	380.4	444.2	451.9	448.1	154.5	181.2	168.3
Zagazig (B.)	374.5	394.9	384.2	468.5	455.3	462.2	155.2	147.6	151.5
" (M.)	406.1	362.8	383.7	447.0	452.7	450.0	145.1	181.9	164.1
Sharqiya	410.0	372.8	391.3	442.2	451.3	447.2	146.1	173.0	159.6
Whole Egypt	395.6	376.1	385.7	445.2	459.2	451.0	156.6	161.7	159.0

Amongst the other districts Kafr Saqr gives the lowest proportion of the old age-group and almost the highest of the middle-aged class. One has to remember that in this district wide areas of land are under reclamation and not a small number of young labourers have settled there in recent years. It is interesting to notice the great similarity in the distribution of the age-groups in Belbeis, M. El-Qamh and Zagazig (M) districts. Higher proportions of old people and smaller numbers in the younger group characterise the age distribution of their populations. Many young people are known to have migrated from the over-crowded parts of these comparatively more populous districts. This may account for the rise in number of the old age class. At the same time the majority of these married emigrants migrate alone leaving their wives at home. Thus sexual intercourse becomes less frequent and such a fact may shed light on the rather small proportion of the younger age-group in these districts. However, a detailed analytical study of the local birth-rate is needed before anything final can be stated. Furthermore, it is noticeable that the above feature is more significant in M. El-Qamh than in Zagazig (M) in particular. This is due to the fact that the former gives almost the highest density in Sharqiya with no areas under reclamation and therefore more young emigrants are expected, whereas the Tell-El-Kabir estate and the eastern parts of Zagazig (M) are still attractive localities for young settlers.

<sup>67</sup> For detailed statistics see Table XI in Population Census of Egypt, 1927, Part I.

<sup>68</sup> In calculating the figures in this table the not-stated cases were not included.

The distribution of age-groups in the population of Faqus is rather obscure. One may expect a comparatively smaller proportion of old people in such less populous districts with a great demand for younger immigrants. But why is Faqus district characterized by the lowest figure for the middle age-group and the highest for the younger class? This feature seems to be superficial and may be partly due to the fact that many of the semi-nomads of the middle age-group were carrying out their seasonal movement at the time of the census-taking and therefore were enumerated elsewhere.

In general the distribution of age-groups in the people of Sharqiya does not differ much from that of the whole Egyptian population. The outstanding feature is the great difference in the sex-ratio of the two populations in the old age-group. In the case of Sharqiya females (aged 45 and over) exceed the males of the same group by 26.9 per 1,000, whereas the difference is only 5.1 per 1,000 in the "old" class of the Egyptian population. This is further evidence bearing upon the comparatively higher average age of the women of Sharqiya, a phenomenon to which we have already referred.

#### The Household.

The study of the trend of population, of sex ratio and of age distribution, though of great value in any demographic analysis, does not help us to construct a vivid picture of the community. This is so because - using Carr-Saunders' <sup>70</sup> words - human society is not composed of units thrown together by chance like so many grains of sand. It consists of groups of persons who, at least so far as the adult members of the groups are concerned, have come together consciously and of set purpose. These groups are typically family groups - father, mother and children with whom may be living other relatives. The best term is perhaps "household." The household is of paramount importance in eastern society not only because it plays so large a part in emotional life, but also because there still flourishes the "joint family" including in one homestead all the direct male descendants with their wives and family. The oldest male member is head of the family and exercises almost unlimited patriarchal power. From the economic point of view there is an element of communism in the sense that the normal unit of the eastern rural society is the family composed of two, three or more generations and augmented by other relatives who, though they may not form part of the household, share the family budget.

But the statistical study of the household in such a complicated family system is not simple. On the one hand the personal schedule which was adopted until the 1917 census necessitated the neglect of all details concerning the very important questions bearing upon the family as a social unit. <sup>71</sup> On the other hand little use has been made of the information gathered after the adoption of the family schedule in the census of Egypt, and the value of the published figures is regrettably limited as far as these particular aspects are concerned.

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<sup>70</sup> Carr-Saunders and Jones, op. cit. p.8.

<sup>71</sup> Census of Egypt, 1917. Vol.II, p.xiv.



It may be argued that since we are dealing with a family group, the problem of the household can be approached by inquiring about the number of married persons in the community. Such a line of approach may be fairly satisfactory in a western society, where married couples usually form the centre of a single household; but the joint-family system - which characterises rural society in the east - casts grave doubts on the validity of this criterion in gauging the composition of the household in Sharqiya.

It is probable that valuable information upon the household may be obtained by the use of that part of the census which deals with the number of occupied dwellings. But here again the definition of a "house" for census purpose in Oriental countries is always vague. The director general of the 1907 census, realising this difficulty, issued orders defining the house, in this particular sense, "as a building to which a separate number has been affixed for Census<sup>72</sup> purposes." But despite this definition, and despite the fact that in the great majority of cases the "house" might have coincided with the family in different censuses, one has to accept such general results with much reserve, especially in the case of the figures given for more recent years. There is now a growing tendency in rural Egypt towards the independent family system, with the result that more than one family often live in the one house.

#### Marital Conditions.

Because of the inadequacy of the Egyptian census and the lack of data bearing upon the family's composition and the nature of the household, our study has to be limited to what is called the marital conditions of the people of Sharqiya, an aspect for which more - though by no means precise - information is available. The ratios of marital relations in the populations of different districts of Sharqiya, of the whole province and of the whole country, as recorded in the 1927 census are given in Tables XVII. With the exception of the town of Zagazig (Zagazig (B)) a relation seems to exist between the economic conditions of the district and the male marriage ratio. The more fertile districts give a comparatively higher ratio and vice versa (compare M. El-Qamh, Belbeis, Hihya and Zagazig M. on the one hand with Faqus and Kafr Saqr on the other). As regards the town of Zagazig, with its more urbanized conditions, the male marriage-ratio is naturally low.

An outstanding fact, which is revealed by the figures given for married males and females, is the excess of married women over married men all over Sharqiya, with the exception of the town of Zagazig with its urban conditions. Such an excess seems to be the result of polygamy, which exists amongst the Moslems of Egypt especially where rural conditions prevail. The returns for Zagazig (B) on the contrary show an opposite tendency: i.e. predominance of married men. This can be attributed to the fact that a great number of married men, who come to work in the town, usually leave their wives at home. It may also indicate a comparatively lower frequency of polygamous marriages, a feature

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<sup>72</sup>Census of Egypt, 1907, pp.3-4.

TABLE XVII

(73)

MARITAL CONDITIONS OF THE POPULATIONS OF DIFFERENT DISTRICTS OF SHARQIYA, 1927.

District	M A L E					F E M A L E				
	Never Married	Married	Divorced	Widowed	Not Stated	Never Married	Married	Divorced	Widowed	Not Stated
Belbeis.	566.2	409.8	8.9	13.9	1.1	426.6	415.2	17.3	139.9	1.0
Faous.	620.3	355.6	8.5	13.3	2.3	482.5	378.0	15.0	123.9	0.6
Hihya.	591.5	383.5	11.1	12.7	1.2	455.4	387.9	19.9	135.4	1.5
Kafr Saqr.	612.3	366.7	7.9	11.4	1.7	466.6	380.3	17.7	133.9	1.5
M.El-Qamh.	565.4	408.8	9.4	15.1	1.4	440.4	413.4	16.5	128.6	1.1
Zagazig (B.)	594.1	376.2	9.1	17.2	3.4	476.6	389.8	21.7	108.6	3.3
" (M.)	590.0	384.8	9.7	14.1	1.4	448.6	389.2	16.4	144.5	1.3
Sharqiya.	590.9	384.4	9.3	13.8	1.6	454.1	393.8	17.2	133.7	1.2
Whole Egypt.	578.0	396.0	9.0	15.0	2.0	450.0	410.0	17.0	122.0	1.0

(73) Calculated from figures given in the 1927 Census, See-  
Population Census of Egypt, 1927. Part I. pp. 65.(74) This is a translation of a term used in the Egyptian Census for all individuals who have not yet  
spouses. It includes young people who may marry as well as older people who may never marry.

T A B L E   XVIII.

**MARITAL CONDITIONS OF THE POPULATIONS OF DIFFERENT DISTRICTS OF SHARQIYA  
(AGED 15 YEARS AND UPWARDS), 1927**

(per 1,000 population)

District	M A L E					F E M A L E				
	Never Married	Married	Divorced	Widowed	Not Stated	Never Married	Married	Divorced	Widowed	Not Stated
Belbeis.	269.4	690.2	15.0	23.5	1.9	102.6	649.8	27.1	218.9	1.6
Faqus.	332.7	625.0	14.9	23.4	4.0	139.2	628.8	24.9	206.2	0.9
Hibya.	308.2	649.3	18.8	21.5	2.2	136.2	615.2	31.5	214.7	2.4
Kafr Saqr.	325.9	637.6	13.7	19.8	3.0	140.8	612.7	28.4	215.7	2.4
M. El-Qamh.	277.4	679.7	15.6	25.0	2.3	121.0	649.3	25.9	201.9	1.9
Zagazig (B.)	350.9	601.4	14.6	27.5	5.6	135.1	644.1	35.9	179.5	5.4
" (M.)	309.6	647.9	16.4	23.7	2.4	134.7	610.8	25.7	226.8	2.0
Sharqiya.	306.6	651.6	15.7	23.3	2.8	129.5	627.9	27.4	213.2	2.0
Whole Egypt.	302.0	654.0	16.0	25.0	3.0	121.0	654.0	27.0	196.0	2.0

which is quite understandable in an urban centre, with a relatively higher social standard and with certain economic conditions. But the excess of married males in Zagazig (B.) should not imply a complete absence of polygamy. Evidences of the existence of this practice in the town are supported by statistics given in Table XIX.

The number of polygamous marriages among the Moslems of the province (two wives in general) seems to be rather small. For the whole province the ratio is 71.7 per 1,000 married Moslem males, but in Faqus it rises to 92 (Table XIX). It may be worth noting that, besides the comparatively low ratio of polygamous marriages in the town of Zagazig, there exists a rather significant difference between the ratios of different districts. The comparison of the figures given

T A B L E XIX

Married Moslem Males in Sharqiya by District and Number of Wives, 1927. (per 1,000 population)<sup>75</sup>

District	Number of Wives (per 1,000)			
	1	2	3	4
Belbeis	926.6	67.3	5.6	0.5
Faqus	908.0	83.3	8.1	0.6
Hihya	939.0	57.8	3.1	0.1
Kafr Saqr	920.0	73.0	6.5	0.5
M. El-Qamh	949.1	48.2	2.6	0.1
Zagazig (B.)	954.9	42.7	2.2	0.2
" (M.)	920.5	72.7	6.2	0.6
Sharqiya	928.3	66.0	5.3	0.4

in Table XIX for M. El-Qamh and Hihya on the one hand and for other districts (Faqus in particular) on the other,<sup>76</sup> may suggest that in the highly developed (from the economic standpoint) parts of Sharqiya polygamous marriages are less frequent. Is this because in these districts the social standard is comparatively higher and consequently polygamy is less desirable? Or may it be due to the fact that in M. El-Qamh and Hihya the density of population is greater, the economic scope is limited and the desire for a smaller family is prevalent? Both factors may underlie this tendency, but with the help of available information, one cannot go any further. It may be remembered that in the discussion of the male marriage ratio, Faqus stood out as having the lowest figure in the province (Table XVII). The markedly great number of polygamous marriages in the same

<sup>75</sup> Calculated from figures given in the Census of Egypt, 1927, Table XV. p.70.

<sup>76</sup> In the case of Zagazig district it is true that the western parts of it are highly developed, but on the other hand the eastern parts are far from being developed.

district does not allow us to accept the economic factor as a satisfactory explanation for the former feature. The low male marriage ratio in Faqus may be somewhat superficial. Many married men of the semi-nomadic class might have been absent on the day of enumeration.

The trend of marriage rates for the population of Sharqiya cannot be ascertained. No details about marital conditions in different districts or even in different provinces are available in the census of Egypt prior to 1917, and the comparative value of the figures given in the last censuses is therefore limited. It is usually held that marriage is the most stable factor among the ever-changing features of vital statistics in advanced nations during recent decades.<sup>77</sup> If the figures given in Table XX are taken to indicate the general tendency of marriage rate in Sharqiya, it is interesting to notice how this rate maintains a rather remarkable constancy in the two censuses. Furthermore, the negligible difference between the ratios of 1917 and 1927 shows the insignificant effect of the marriage law<sup>78</sup> of 1923 on the trend of marriage in the province.

T A B L E XX

Number of Married Persons and Rate of Marriage (per 1,000 Population)  
in Different Districts of Sharqiya; 1917 and 1927.<sup>79</sup>

District	Population		Number of Married Persons		Ratio of Marriage (per 1,000 Population.)	
	1917	1927	1917	1927	1917	1927
Belbeis	138,086	142,384	56,138	58,751	406.5	412.6
Faqus	145,207	162,787	54,531	59,735	375.5	366.4
Hihya	120,554	124,672	46,683	48,090	387.2	385.7
Kafr Saqr	118,015	132,458	43,576	49,500	369.2	373.7
M. El-Qamh	164,472	166,565	66,747	68,483	405.8	411.1
Zagazig (B.)	42,942	52,839	16,688	20,220	388.1	382.3
" (M.)	226,221	235,207	88,089	91,043	389.4	387.1
Sharqiya.	955,497	1,016,912	372,452	395,822	389.9	389.2

Statistics bearing upon the distribution of marriages by specific age-groups are completely lacking as far as the population of Sharqiya is concerned. We, therefore, are not in a position to determine the real trend of mar-

<sup>78</sup>The object of this law is to stop child marriage in Egypt. According to this law the minimum age for marriage is 16 for girls and 18 for boys.

<sup>79</sup>Rates of marriage for different districts are calculated from the figures given in the 1917 and 1927 Censuses.

riage even in the very recent decades. Such a study needs to take into consideration the age composition of the population in relation to the marriage rate. Table XVIII may be of some value since it gives the ratios of marital conditions per 1,000 population aged fifteen years and upwards.

As to the age of marriages, no sufficient data are available and consequently nothing definite can be stated about the trend of marriage-age. Marriage, however, is regarded by the Moslems in general as a positive duty, and to neglect it without a sufficient excuse subjects a man to severe reproach. "When a servant marries," said the Prophet, "verily he perfects half his religion." The prevailing tendency in rural Egypt has always been towards early marriage. Besides religious reasons, other factors, such as the great desire for having children, the physiological effect of a rather hot climate and the absence of almost all means of recreation in the Egyptian village, are the strong factors underlying this tendency. Before 1923 child marriage occurred in Egypt, though to a rather small degree, but since that year no marriage contract is valid for a girl younger than 16 or a boy younger than 18.

The figures given in Table XXI may throw some light on the frequency incidence of marriages in different age-groups. Although the table reveals that marriage in the lower age groups is more frequent among both males and females, yet boys marry comparatively later than girls, a feature which seems to be universal. Thus whereas almost half of the females marry under 20, only 64 per 1,000 males do this. The tendency for the wife to be younger than the man is

T A B L E XXI

Frequency Incidence of Marriage by Age-Groups in Sharqiya, Whole Egypt and Cairo, 1936. (per 1,000 population)<sup>80</sup>

Locality	under 20 years	20-24	25-29	30-34	35-39	40-49	50-59	60-69	70 and over
BRIDEGROOM									
Sharqiya	64.2	361.8	251.7	119.1	86.9	74.1	29.8	9.5	2.9
Whole Egypt	40.0	301.0	300.1	137.3	93.6	84.5	31.5	9.3	2.8
Cairo	21.8	197.2	270.8	195.1	159.5	112.8	33.4	7.7	1.7
BRIDE									
Sharqiya	455.2	259.4	123.0	73.7	46.2	35.6	6.0	0.8	0.1
Whole Egypt	445.4	273.3	134.2	70.6	41.4	29.1	5.2	0.7	0.1
Cairo	421.0	200.4	162.7	98.8	63.9	45.0	7.8	0.3	0.1

<sup>80</sup>The ratios are calculated from figures given in the Annual Report on the Work of the Ministry of Public Health for 1936, pp.12 - 13.

world-wide and in communities where every man marries and remarries at whatever age, the age discrepancy between man and wife is often great; older women are rarely chosen in marriage save among highly sophisticated people, and there are eleven times as many widowers as widows in Sharqiya. Higher standards of spending and more influence of non-Egyptian and non-Islamic customs in Cairo lead to a higher age of marriage for men, but the difference for the women is small.

Divorce is commoner in towns than in villages, and the man usually marries again, but divorced women are not so often chosen in marriage, so there are more divorced women. The divorce rate in 1936 was 8.7 per 1,000 marriages in Sharqiya and 14.0 per 1,000 marriages in Cairo.<sup>81</sup>

The Moslem husband can put his wife away from mere dislike and without assigning any reason. The woman, on the contrary, cannot separate herself from her husband against his will, unless it be for some considerable fault on his part, such as cruel treatment or neglect, and even then she forfeits any portion of the husband's payment which is still uncompleted.<sup>82</sup> It is natural, therefore, to expect more divorced cases from the husband's side rather than from the other side. The following figures are for Moslem divorced cases in Sharqiya and Cairo for 1936.<sup>83</sup> Actually the number of divorces from the wife's side is somewhat misleading. It is a well-known fact that some husbands do not take the initiative, but leave their wives in a state of suspense until the

	<u>Sharqiya</u>	<u>Cairo</u>
From husband:	2,612	3,592
" wife:	1,516	1,767
" both:	780	2,230
	<hr/>	<hr/>
Total:	4,908	7,589

latter appear in the Kadi's Court. Thus the husband escapes the payment of the remnant of the dowry.

Dislike is the main cause of divorce. This is easy to understand, as marriages are settled by parents and there is no chance of pre-marital understanding between man and wife. Causes of divorce in Cairo show a more evenly scattered estimate of causes and economic factors obviously come in.

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<sup>81</sup>Annual Report on the Work of the Ministry of Public Health for 1936, pp.14 - 15.

<sup>82</sup>In Moslem marriages the giving of a dowry is indispensable. A husband, however, may postpone the payment of a portion of the dowry, which he is compelled to pay if divorce occurs with the exception of such cases as mentioned above. On marriage and divorce among Moslems see - Lane, Edward William. The Manners and Customs of The Modern Egyptians, Chapter III.

<sup>83</sup>Annual Report on the Work of the Ministry of Public Health for 1936, pp.16 - 17.

T A B L E XXII

Number and Causes of Divorced Cases Registered for Moslems in  
Sharqiya and Cairo, 1936.84

Particulars	Total Number of Divorces.	Causes of Divorce																		
		Illness.	Neglect to keep and provide.	Old age.	Polygamy.	Cruelty and Abusive treatment.	Intoxication.	Addiction and Narcotics.	Gambling.	Negligence.	Dislike.	Sterility.	Misbehaviour.	Misconduct.	Abandonment of husband's house.	Incompatibility.	Quarrels.	Breach of Contract.	Mutual ill- treatment.	Other Causes.
From husband " wife " both	4,908	40	183	9	403	25	5	-	88	4	1,781	-	-	-	-	-	-	-	-	74
		59	-	7	-	-	-	-	-	2	1,130	242	36	5	1	-	-	-	-	34
		-	-	-	-	-	-	-	-	-	436	-	-	-	-	252	51	-	37	4
from husband " wife " both	7,589	27	1,283	24	730	26	43	2	115	40	934	-	-	-	-	-	-	-	-	368
		96	-	28	-	-	-	-	-	230	445	284	164	187	49	-	-	-	-	284
		-	-	-	-	-	-	-	-	8 (mutual)	244	-	-	-	-	1,201	570	17	75	115

84 Annual Report on the Work of the Ministry of Public Health for 1936, (Cairo, Government Press, 1940)  
pp. 16 - 17.



T A B L E XIII

Divorce Cases Among Moslems of Sharqiya and Cairo, in 1936.<sup>85</sup> Classified by:  
A: Duration of Married Life.

Locality	Duration of Marriage.						Total number of Divorces
	under 6 months	6 months to one year	1 - 4	5 - 10	10 - 14	15 - 19	20 and over
Sharqiya Cairo	788 2,056	658 986	2,213 2,775	723 1,027	275 372	125 214	126 159
							4,908 7,589

B: Number of Living Children Born During Marriage.

Locality	Number of Living Children Born During Marriage.						Total number of Divorces.
	None	1	2	3	4	5	6 and over
Sharqiya Cairo	3,623 5,788	869 1,016	230 398	109 225	42 94	16 47	19 21
							4,908 7,589

<sup>85</sup>Annual Report on the work of the Ministry of Public Health for 1936, pp.14 - 15.

In Table XXIII the number of divorce cases among the Moslems of Sharqiya and Cairo in 1936 is classified by duration of married life on the one hand and by number of living children born during marriage on the other. Divorce is naturally more frequent during the early stages of married life and before the number of children increases - two factors which of course are not unconnected. But it may be interesting to notice the comparatively greater frequency of divorces among the Moslems of Cairo during the first six months of marriage; 270.9 per 1,000 divorces as against 160.5 in the case of Sharqiya. Such a feature may partly be explained by more incidence of sentimental marriages in the city.

### Size of Family

As to the family composition some details may be available when the final results of the 1937 census is published. The following table gives an idea of the number of families and the average number of the family in different districts of Sharqiya according to the preliminary results of the last census. The outstanding fact which the figures reveal is the comparatively lower average of the family in the more fertile and consequently the more crowded districts (compare figures for M. El-Qamh, Hihya and Belbeis with those for Faqus and K. Saqr).

T A B L E XXIV

Number of Families and Average Number of the Family in Different Districts of Sharqiya, 1937.

District	Population	Number of Families	Average Number of the Family
Belbeis	155,921	33,116	4.70
Faqus	193,035	36,336	5.31
Hihya	131,732	27,620	4.76
Kafr Saqr	135,241	26,199	5.16
M. El-Qamh	176,109	35,335	4.98
Zagazig (B.)	59,321	11,551	5.13
" (M.)	268,097	51,586	5.19
Sharqiya	1,119,456	221,743	5.04

The factors underlying this fact are, for the time being, difficult to ascertain. One needs reliable records of local birth and death-rates and a thorough understanding of the attitudes of people towards marriage and child-birth in different districts of the province before any definite statement can be made. Economic pressure may be a dynamic factor in keeping the number of the family rather low. It has already been noticed that polygamous marriages are less frequent in these crowded districts, and the general trend seems to indicate that the size of the family in the province as a whole with its steady increas-

To bring the discussion of this aspect to its end it is important to emphasize that averages of family composition mean very little in social studies. Far more important is information showing how many families there are of varying sizes. Such information is available in the 1917 census only and therefore the value of our study is somewhat limited. About 60% of the households of Sharqiya have 1-5 members; about one third have 6 - 10 members; larger households occur in quite small numbers. Nothing was given in the census about the definition of the terms which were used, and consequently it is impossible to determine the type of families with which we are now concerned. It is improbable, however, that the "joint-family" was neglected in the census, and one is left to wonder whether the rather small proportion of the large size families was due to lower frequency of the "joint-family" system in the province or to the limited number of the different "private families."

The influence of urbanization on the family size may be realised by comparing the figures of the town of Zagazig with those of the rural parts of the province. The difference is not so significant, but despite the slow process of social change in the east the tendency towards limited families is growing in Egyptian society, not only because of European influence. Other economic and social considerations must be taken into account. It is naturally stronger in the big cities (Table XXVII), has recently spread to provincial centres and will sooner or later affect the rural population,

#### The Household in Relation to Economic Conditions

It may be worthwhile to make a few remarks about the constitution of the household in relation to the economic conditions of the province as revealed in the intensive socio-economic study of a representative sample of the population. The limited scope of employment in rural Sharqiya and the monopoly of most of the land by a very small minority have created a class of dependents of considerable significance in proportion to the numbers of earners in each household. The proportion of earners<sup>90</sup> to the total number of the household is extremely small: in over 40% of cases not more than 15% of the members of the households are earners, while in only 3.1% of cases, over 50% of the members of the household may be considered as assets. Many of the non-earners in the families are actually working on the farm. This, however, happens because no

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<sup>86</sup> No data bearing on this question are available in most Egyptian censuses. At the 1882 census, however, the average of the family for the whole province was 5.53. The averages for different districts in 1882 cannot be compared with those of the 1937 census because the administrative divisions of Sharqiya have undergone a rather significant change.

<sup>90</sup> We have considered as "earners" those persons whose labour either adds materially to the total income of the household or those who carry out some sort of work which otherwise would have to be done by hired labour.

## Distribution of Population by

Locality	Total Number of Families	Number in Families						
		1	2	3	4	5	6	7
Zagazig (Town)	No. 7,738	602	1,013	1,116	1,257	1,048	826	638
	%	7.8	13.1	14.4	16.2	13.5	10.7	8.2
Other Localities	No. 157,832	8,982	16,657	21,581	23,811	22,650	18,643	13,728
	%	5.7	10.6	13.7	15.1	14.4	11.8	8.7
Sharqiya	No. 165,570	9,584	17,670	22,697	25,068	23,698	19,469	14,366
	%	5.8	10.7	13.7	15.1	14.3	11.8	8.7

<sup>17</sup>Calculated from figures given in the 1917 Cens  
The Census of Egypt taken in 1917, Cairo Gover

Families of Varying Sizes in Different Parts of Sharqiya<sup>87</sup>  
(1917)

Composed of												
8 (persons)	9	10	11	12	13	14	15	16	17	18	19	20 & over
422	268	176	132	62	70	29	13	15	10	8	5	8
5.5	3.5	2.3	1.7	1.1	0.9	0.4	0.2	0.2	0.1	0.1	0.1	0.1
9,349	6,389	4,298	3,045	2,245	1,578	1,198	872	692	495	432	424	767
5.9	4.0	2.7	1.9	1.4	1.0	0.8	0.6	0.4	0.3	0.3	0.3	0.5
9,767	6,657	4,474	3,177	2,327	1,648	1,227	885	707	505	440	429	775
5.9	4.0	2.7	1.9	1.4	1.0	0.7	0.5	0.4	0.3	0.3	0.3	0.5

us of Egypt, See:-

nment Press, 1921 pp.646-7.

TABLE

## Frequency Distribution of

Particulars		Sizes of								
		1	2	3	4	5	6	7	8	9
		(Persons)								
Owners of Land	No.	-	2	1	4	8	5	7	7	5
	%	-	3.2	1.6	6.3	12.7	8.0	11.1	11.1	8.0
Tenants	No.	-	1	1	1	2	-	4	1	-
	%	-	6.7	6.7	6.7	13.3	-	26.6	6.7	-
Part Owners & part Tenants	No.	-	-	1	4	1	1	3	4	4
	%	-	-	3.2	12.9	3.2	3.2	9.7	12.9	12.9
Owners with other resources	No.	-	1	-	5	2	8	2	3	3
	%	-	2.9	-	14.3	5.7	22.9	5.7	8.5	8.5
Tenants with other resources	No.	-	1	1	1	7	5	5	-	4
	%	-	3.7	3.7	3.7	26.0	18.5	18.5	-	14.8
Part Owners & tenants with other resources	No.	-	-	1	2	5	-	2	1	3
	%	-	-	4.8	9.5	23.8	-	9.5	4.8	14.3
Agr. Labourers etc.	No.	4	3	7	5	7	4	4	2	-
	%	10.5	7.9	18.4	13.2	18.4	10.5	10.5	5.3	-
General Total	No.	4	8	12	22	32	23	27	18	19
	%	1.7	3.5	5.2	9.6	13.9	10.0	11.7	7.8	8.3

<sup>86</sup>Based on empirical data gathered during the Socio-economic

## Sizes of Households

Households												TOTAL
10	11	12	13	14	15	16	17	18	19	20	Over 20	
4	1	4	3	2	2	4	2	1	-	-	1	63
6.3	1.6	6.3	4.7	3.2	3.2	6.3	3.2	1.6	-	-	1.6	
1	2	1	-	-	-	1	-	-	-	-	-	15
6.7	13.3	6.7	-	-	-	6.7	-	-	-	-	-	
2	4	2	-	2	1	-	-	1	1	-	-	31
6.5	12.9	6.5	-	6.5	3.2	-	-	3.2	3.2	-	-	
-	2	1	-	2	1	2	2	-	-	1	-	35
-	5.7	2.9	-	5.7	2.9	5.7	5.7	-	-	2.9	-	
-	2	-	-	-	-	-	-	1	-	-	-	27
-	7.4	-	-	-	-	-	-	3.7	-	-	-	
1	-	2	1	1	-	-	-	1	-	1	-	21
4.8	-	9.5	4.8	4.8	-	-	-	4.8	-	4.8	-	
-	1	-	-	-	-	-	1	-	-	-	-	38
-	2.6	-	-	-	-	-	2.6	-	-	-	-	
8	12	10	4	7	4	7	5	4	1	2	1	230
3.5	5.2	4.3	1.7	3.0	1.7	3.0	2.2	1.7	0.4	0.9	0.4	

study of Sharqiya; 1939.

## T A B L E XXVII

Percentage Distribution of the Populations of some Rural and  
Urban Centres by Family Size, 1917<sup>89</sup>

Locality	Percentage of Total Number of Families composed of			
	1 - 5	6 - 10 (persons)	11 - 15	16 & over
Sharqiya	59.6	33.1	5.5	1.8
Rural Sharqiya	59.5	33.1	5.7	1.8
Zagazig (Town)	65.0	30.2	4.3	0.6
Cairo	73.0	23.0	3.0	1.0
Alexandria	72.0	25.0	2.5	0.5

<sup>89</sup>The figures for Cairo and Alexandria are taken from the Census of Egypt 1917, Vol. ii, pp. 675-7.



other profitable work is available, and has to be taken as a symptom of under-employment, which is one of the major problems of the Egyptian rural community.

Many difficulties arise from the nature of the constitution of the household. The solidarity of the family in the East makes it a sort of charitable organization. The conventional code in rural society allows - to a great extent - relatives in real or fancied need, whatever the cause, to come and live with those members of the family who may be economically more successful. Table XXVIII gives the distribution of dependants in proportion to the sizes of the households. Children and wives of the earning members have been excluded in order to determine the part played by other relatives in the constitution of different households. The figures indicate very clearly the significance of the joint family in the community. In the whole sample about 50% of the households have dependents other than the children and wives of the earners.

The heaviness of the burden is shown by the fact that in 20% of our sample, dependents form over 40% of the total household. Wives and children of sons figure largely among these dependents, as can easily be understood in view of the hesitation to subdivide a small holding and of the persistence of early marriage. Naturally brothers and their wives and children are important parts of the joint family for the same reasons (Table XXIX). This feature is diminishing in importance as more young men adventure out in search of independence.

Inquiries have shown that a sort of co-operation must continue between brothers to avoid the parcelling of the holding and to decrease the current expenses of agricultural operations. Such an economic co-operation can be arranged so as to leave the persons concerned completely independent in their private home affairs.

The joint family as a socio-economic institution may prove to be suitable for the rural community of Sharqiya. It is extremely important, however, not to misuse it so that the producing and earning members of the family are heavily overburdened economically. The great obstacle in the way of such a reform is the absence of charitable organizations in the country and the rise in the numbers of paupers as a natural result of a rapidly increasing population in a community whose natural resources and economic potentialities fall far behind the needs of its members.

T A B L E

## Frequency Distribution of Dependants

			Proportion of Dependants						
Particulars		No Depend- ants.	0.1-5	5.1- 10	10.1- 15	15.1- 20	20.1- 25	25.1- 30	30.1- 35
Owners of Land.	No.	28	-	3	3	3	2	-	1
	%	45.9	-	4.9	4.9	4.9	3.3	-	1.6
Tenants.	No.	8	-	1	1	1	-	-	-
	%	50.0	-	6.3	6.3	6.3	-	-	-
Part Owners and part Tenants.	No.	9	-	2	2	-	2	-	3
	%	29.0	-	6.5	6.5	-	6.5	-	9.6
Owners with other resources.	No.	19	-	1	1	3	2	-	1
	%	51.4	-	2.7	2.7	8.2	5.4	-	2.7
Tenants with other resources.	No.	16	-	1	4	2	-	-	-
	%	61.5	-	3.8	15.5	7.7	-	-	-
Part Owners and Tenants with other resources.	No.	8	-	-	1	4	1	-	-
	%	40.0	-	-	5.0	20.0	5.0	-	-
Agr. Labourers etc.	No.	31	-	-	1	1	1	2	1
	%	81.6	-	-	2.6	2.6	2.6	5.3	2.6
General Total.	No.	119	-	8	13	14	8	2	6
	%	52.0	-	3.5	5.7	6.1	3.5	0.9	2.7

## XXVIII

(other than the children and wives of the earners)

to Total number of Household  
(in %)

35.1- 40	40.1- 45	45.1- 50	50.1- 55	55.1- 60	60.1- 65	65.1- 70	70.1- 75	75.1- 80	Over 80	TOTAL
3	3	5	1	2	-	-	4	2	1	61
4.9	4.9	8.2	1.6	3.3	-	-	6.6	3.3	1.6	
1	1	2	-	-	-	-	1	-	-	16
6.3	6.3	12.5	-	-	-	-	6.3	-	-	
2	-	2	2	3	1	2	-	1	-	31
6.5	-	6.5	6.5	9.6	3.2	6.5	-	3.2	-	
4	-	3	-	-	2	-	1	-	-	37
10.5	-	8.2	-	-	5.4	-	2.7	-	-	
-	-	1	-	1	1	-	-	-	-	26
-	-	3.8	-	3.8	3.8	-	-	-	-	
-	-	1	1	3	1	-	-	-	-	20
-	-	5.0	5.0	15.0	5.0	-	-	-	-	
-	-	-	-	1	-	-	-	-	-	38
-	-	-	-	2.6	-	-	-	-	-	
10	4	14	4	10	5	2	6	3	1	229
4.3	1.7	6.1	1.7	4.3	2.2	0.9	2.7	1.3	0.4	

T A B L E XXIX

Frequency Distribution of Dependents according to their Relation  
to the Head of the Household<sup>91</sup>

Particulars	Parents		Brothers		Sisters		Wives & Children of Sons.		Wives & Children of Brothers.		Grand Parents	Mothers or Fathers-in-law.	Sisters' Relatives.	Other Relatives.	Domes- tic Servants.	TOTAL.
Owners of Land.	No.	6	19	8	85	28	1	1	1	1	1	1	1	1	5	154
	%	3.9	12.3	5.2	55.2	18.2	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	3.2	
Tenants	No.	1	5	-	12	12	-	-	-	-	-	-	-	-	-	31
	%	3.2	16.1	-	38.7	38.7	-	-	-	-	-	-	-	-	-	
Part Owners & part Tenants.	No.	4	4	5	76	7	-	-	-	-	-	-	-	-	-	96
	%	4.2	4.2	5.2	79.2	7.3	-	-	-	-	-	-	-	-	-	
Owners with other re-sources.	No.	4	12	6	36	10	-	-	-	-	-	-	-	-	-	68
	%	5.9	17.6	8.8	52.9	14.7	-	-	-	-	-	-	-	-	-	
Tenants with other re-sources.	No.	4	4	6	14	1	1	1	1	1	1	1	1	1	2	34
	%	11.8	11.8	17.6	41.2	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	5.9	
Part Owners and Tenants with other resources.	No.	2	9	7	29	6	-	-	-	-	-	-	-	-	-	62
	%	3.2	14.5	11.3	46.8	9.7	-	-	-	-	-	-	-	-	-	
Agr. Labour-ers etc.	No.	2	1	3	4	-	-	-	-	-	-	-	-	-	-	20
	%	10.0	5.0	15.0	20.0	-	-	-	-	-	-	-	-	-	-	
G.Total.	No.	23	54	35	256	64	2	2	2	2	2	2	2	2	7	465
	%	4.9	11.6	7.5	55.1	13.8	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	1.5	

<sup>91</sup> Wives and children of the head of the household are excluded.

<sup>92</sup> Wife of a brother's son.

<sup>93</sup> Son of the wife by another husband.

<sup>94</sup> Children of a brother's son.  
<sup>95</sup> Cousins, children of a sister and her husband.

## III

## STUDY OF THE DISTRIBUTION OF POPULATION

## Density of Population

It is always difficult to decide the area to be considered in calculating density of population. We cannot usefully consider areas of sheer desert, but there are many grades of productivity, and this introduces an element of doubt and inexactitude.

Table XXX gives the number of inhabitants per square kilometre for different districts of the province, as calculated from the returns of the last six censuses, 1882 - 1937. There is an almost continuous gradation from higher densities in the south and south-west to lower ones in the east and north-east.<sup>96</sup>

T A B L E   XXX

Density of Population in the Districts of Sharqiya, for the Last Six Censuses.

District	Number of Inhabitants per Square Kilometre					
	1882	1897	1907	1917	1927	1937
Belbeis	180	263	301	330	340	373
Faqus	17	36	50	59	66	78
Hihya	192	325	365	400	414	437
Kafr Saqr	82	142	183	203	228	232
M. El-Qamh	301	445	499	552	559	591
Zagazig (B.)	2,716	4,865	4,787	5,436	6,688	7,509
" (M.)	117	191	218	244	254	289
Sharqiya	89	145	171	191	203	224
Whole Egypt	191	274	318	362	403	452

According to their densities of population, the different parts of Sharqiya may be grouped as follows:

I. Less than 100 per km.<sup>2</sup>; extreme north of Kafr Saqr, extreme north and north-east of Faqus and district of Tell-El-Kibir including El-Abbasah.

II. 100 - 299 per km.<sup>2</sup>; central Kafr Saqr and Faqus districts, some localities in eastern Hihya, and east Belbeis west of Ismailia Canal.

<sup>96</sup> See Map IV.

III. 300 - 499 per km.<sup>2</sup>; southern Kafr Saqr and Faqus, eastern, western and northern parts of Hihya, the east of Zagazig district to the W. of El-Abbasah, central and western parts of Belbeis (except a limited area in the extreme south-west of the district) and the eastern part of M. El-Qamh.

IV. 500 - 699 per km.<sup>2</sup>; very limited areas in S.W. Faqus and Belbeis, some parts in central and southern Hihya, El-Qurein, most of central and western Zagazig and some localities in the east of M. El-Qamh.

V. 700 and over per km.<sup>2</sup>; Ibrahimieh in the district of Hihya, the rural area around the town of Zagazig and most of central and western M. El-Qamh.

As to the chief towns of the different districts, Belbeis (212) falls in group II, whereas Hihya (720), Kafr Saqr (966), M. El-Qamh (1,307) and Faqus (1,619) may be included in group V. With the comparatively marked high density of Zagazig (6,324), it is difficult to include this town in any of the above groups. It may be justifiable to consider this town separately and to understand its density in the light of the almost universal factors determining the growth of urban centres.

As traditional factors are fairly uniform throughout the province, the differences are largely due to physical and economic factors. One notes that south-western Sharqiya is 13 - 14m. but much of Faqus and Kafr Saqr only 3 - 6 m. above sea level.<sup>97</sup> This helps the drainage of the south, but the north is liable to impregnation with salt or alkali in places less than 7m. above sea level.<sup>98</sup>

As to the causes of the deterioration in the fertility of such waste lands-"Ard-Al-Barari" - many explanations are given. According to local tradition, partly confirmed by the presence of some historic remains, a wide area of this land was once cultivated and consequently more populous. The Arab Conquest seems to have been partly responsible for the destruction of the banks of the old basins. There is also some evidence that the level of the land along the northern fringe of the Delta fell and some of the northern tracts were submerged. The introduction of perennial irrigation has no doubt greatly helped the accumulation of salts and the development of alkaline soils in this part of the province.

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<sup>97</sup> Most of the very northern parts of Faqus and Kafr Saqr - the so-called "Ard-Al-Barari" - are below one metre. See:-

(a) The contour map of the Nile Delta 1: 300,000.  
(b) Map V.

<sup>98</sup> Means, T.H. Reclamation of Alkali Lands in Egypt. (Bulletin of U.S. Department of Agriculture No.21, 1903, p.9). Quoted by Hume, W.F. Geology of Egypt, Vol.X, Cairo, 1925. p.190.

<sup>99</sup> Amer, Mustafa. Some Problems of The Population of Egypt, Cairo, 1929, p.8.

Another district of Sharqiya has been ruined by the high-lying perennial canals, and its density of population will remain for some time comparatively low. The ruin of the land of El-Wadi (Wadi-Tumilat) estate was brought about by the construction of the Ismailia Canal which was completed in 1863. "This is a high-level canal passing through a porous soil and the leakage of water from it must be enormous. The seepage water percolating on the adjoining lands raised the general level of the sub-soil water; in places waterlogged the soil and everywhere within reach brought to the surface the injurious salts that were formerly at a sufficient depth to be out of the way of the roots of the crops, and so harmless."<sup>100</sup> The one great cause of all the mischief was lack of drainage in the first instance. It may be laid down as a general rule that there cannot be any excessive accumulation of injurious salts in land that is efficiently drained.<sup>101</sup>

The introduction of perennial irrigation into any tract in Egypt means a total change in crops, irrigation and indeed everything which can affect the soil. The discussion of these different aspects<sup>102</sup> as bearing on the fertility of the land falls beyond the present study. It is of great importance, however, to emphasise that, despite the great efforts that have been made by irrigation and agricultural authorities in Egypt, even the most fertile, dense clay soil

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<sup>100</sup> Lucas, A. A Report on The Soil and Water of the Wadi-Tumilat Lands Under Reclamation. Public Works Ministry Publications, Cairo, 1903, p.16.

<sup>101</sup> Ibid. p.18.

<sup>102</sup> On these different aspects see:

- (a) Willcocks, William. Egyptian Irrigation (Chapter on Perennial Irrigation in Lower Egypt).
- (b) Brunhes, Jean. L'Irrigation, Paris, 1902, Part III.
- (c) MacDonald, Sir Murdoch. Nile Control Works. Ministry of Public Works, Cairo, 1920.
- (d) McKenzie, E. and Burns. The Basis of Egyptian Agriculture and its Relation to the Decline in the Average Yield per Feddan of Cotton. Ministry of Agriculture, Bulletin No.25, 1922.
- (e) Mosserie, M. Victor. Du Sol Egyptien sous le Régime de l'Arrosage par Inondation. Sultanie Agricultural Society Publications, Bulletin, No.12.
- (f) Fletcher, F. "Crop Rotation and Soil Exhaustion" in Cairo Scientific Journal, Vol. II, No.19, April, 1908, pp.119 - 124.
- (g) Montasir, A.H. Egyptian Soil Structure in Relation to Plants. The Egyptian University - Bulletin of the Faculty of Science, No.15, Cairo, 1938.

in the south-west and west of Sharqiya has been injured, and there has been a steady fall in the fertility of this land, which is best revealed in the comparatively low yield per acre in the last years. This fact does not seem to have any noticeable effect on the trend of densities in such parts as M. El-Qamh district or central and western localities in Zagazig and Hihya.<sup>103</sup> The time factor can partly account for this feature. Furthermore, one has to take into account the non-geographical and non-economic considerations. As Prof. Fawcett puts it quite clearly, "traditions, which make the family the principal unit of the Eastern society and for the maintenance of the family insist on early marriage and the essential need of children, have played a large part in the accumulation of dense population. The same solidarity of the family tends to keep all its members near their ancestral home and so to check outward migration and a free spreading of population."<sup>104</sup>

But if the fertility of the land in relation to the system of drainage has greatly influenced the distribution of population in different parts of Sharqiya, the significant part played by the water available to meet the needs of summer crops cannot be exaggerated. The whole province is nominally under perennial irrigation but actually the remote reaches of the irrigation canals in the east and north-east of Sharqiya do not always get the water necessary for the irrigation of the adjoining fields. There is a rise in the level of the land eastwards and northeastwards. The irrigation canals were not adequately constructed, and there may be a misuse of water on the lower reaches of them. The main difficulty, however, lies in the fact that, so far, "the summer supply of water in the Nile is insufficient in nearly all years for the adequate irrigation of the cultivated lands at present dependent on it."<sup>105</sup> How to make the natural supply of water meet the progressive demands of agriculture in the remote reaches of the canals at all seasons of the year has always been the great problem facing irrigation engineers in Egypt. The crops cultivated and the agricultural rotation, centring around the planting of cotton, have increased the difficulties, since the greatest demand for water occurs at the time when the Nile is at its lowest level.

The use of wells for irrigation was widespread in the east and north-east of Sharqiya, as the sand is close to the surface and buried under insignificant depths of clay over large tracts.<sup>106</sup> The development of irrigation, on the one hand, and the sanitary regulations, on the other, have led to the neglect of a great number of these wells. Whenever such wells are still used (such as in

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<sup>103</sup> The discussion of the growth of population and its trends in different parts of Sharqiya throws much light on the trends of densities and explains the comparatively slight increase in 1927 as compared with 1917.

<sup>104</sup> Fawcett, C.B. "Some Factors in Population Density" in Problems of Population, London, 1932, p.196.

<sup>105</sup> MacDonald, op.cit. p.1.

<sup>106</sup> Willcocks, W. op. cit. p.126.



the district of El-Qurein) and crops do not depend on the summer supply of water, the productivity of these remote lands increases and consequently the density of population rises.

The inadequacy of summer irrigation is, moreover, the great obstacle in the reclamation of the extensive waste areas in the northern parts of Sharqiya. These salty tracts need constant washing and repeated flooding. Rice serves this purpose perhaps better than any other crop, but in Egypt the area under rice cultivation is determined by the amount of the summer water supply. Thus the expansion of cultivation has been going on very slowly, and no significant density can be expected in a land now lying almost fallow for want of water. The dependence of the future development of the Barari lands in north Sharqiya on the Nile water supply becomes more understandable when the question of the underground water supply in this part of the Delta is carefully studied. According to the results of different borings, Dr. Hume stated that, in the Delta, water at 40 metres is likely to be found south of latitude  $31^{\circ}$  N., whenever the Nile deposits are well developed. North of that latitude, the influence of the great lagoons begins to be felt, and, therefore, no water or only salt water will probably be obtained.<sup>107</sup> The figures in table XXXI give an idea of the distribution of waste lands and areas under cultivation in different districts of the province, and eventually throw such light upon the present local variations in densities, and the change such variations may undergo if agricultural expansion can be achieved.

The outstanding fact revealed by the figures is that in Sharqiya the waste land is almost equal to the area under cultivation. This may partly account for the lower density of population in the province (224 persons per km.<sup>2</sup> in 1937) as compared with the density for Egypt as a whole 108 (452). The very extensive area of waste land is particularly noticeable in Faqus. On the other hand the population of such uncultivated tracts in M. El-Qamh and Hihya districts is insignificant. The figures for Kafr Saqr are somewhat misleading.

T A B L E XXXI

Area Under Cultivation and waste Land in Different Districts of Sharqiya.<sup>109</sup>

Districts	Area Under Cultivation. (In Feddans) <sup>110</sup>	Waste Land.	Waste Cultivated %
Belbeis	72,264	22,413	31.02
Faqus	130,357	406,270	311.66
Hihya	67,548	1,052	1.56
Kafr Saqr.	105,813	27,329	25.83
M. El-Qamh	67,101	276	0.41
Zagazig (M.)	128,459	84,966	66.14
Sharqiya	571,542	542,306	94.88

<sup>107</sup> Hume, op.cit. Vol.I.p.122

See also

<sup>108</sup> Amer, Mustafa. op.cit. pp.10-11.  
Table XXX.

<sup>109</sup> Based on figures given in  
Agricultural Census of Egypt, 1929,  
pp.124-137.

<sup>110</sup> One feddan = 1.038050 acre.

One must study carefully the analysis of the samples<sup>111</sup> taken from different localities of the province to realise the poverty and consequently the low yield of almost all the land of Kafr Saqr. The agricultural census of Egypt does not give the average yield per feddan by districts. Valuable information, however, can be obtained from the study of the rentals of cultivated areas in the different districts.<sup>112</sup> This does not necessarily imply that the fertility of the land is the only factor that determines rentals. Density of population, for instance, must always be taken into account, and a comparison of maps II, III and IV will reveal the considerable correlation and significant interrelations between land fertility, rental and distribution of population in Sharqiya. In Egypt as a whole there seems to be "a very fair correlation between the yield in Egyptian pounds per feddan and the density of population of such a nature that for every extra pound per annum in the value of the produce there is an increase of 100 persons per square kilometre in the density."<sup>113</sup>

#### Future Distribution of the Density of Population

The future of the distribution of population in Sharqiya can, to some extent, be understood in the light of the foregoing discussion. No significant change can be expected until the question of the water supply is solved, waste land reclaimed and cultivation expanded. The situation in different areas which may be the foci of big concentrations of population in the near or remote future, can be summarized as follows:-

1. Tell-El-Kibir. The total area of the "Wadi Estate" is estimated to be (in round figures) 21,000 feddans of which only 13,000 feddans are now under comparatively poor cultivation, 500 under reclamation and the rest of the land is waste tracts. The water supply here is not the main problem. The lack of adequate drainage is the one great cause of all the mischief. At least three forces are held responsible for the deterioration of the soil of Wadi Tumilat: constant seepage from the Ismailia Canal with its attendant dangers of excessive sub-irrigation and the rise of salt from the subsoil towards the surface, the descent from the higher desert lands on either side of injurious salts already present and likely to be brought down by every fall of rain, and the carrying by the wind of the efflorescent salts from the unreclaimed area and from the desert over the cultivated land.<sup>114</sup> Unfortunately the problem of drainage in this part of Sharqiya is not easy. Owing to a difference in levels at El-Kassassin, the drainage-water has to be pumped from one section of the main drain to the other section.<sup>115</sup> Great efforts must be made if the area is to

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<sup>111</sup> See appendix I, Samples IX, X and XVI.

<sup>112</sup> See Map III.

<sup>113</sup> Atlas of Egypt, Gizeh, 1928.

<sup>114</sup> Lucas A. op. cit. p.24.

<sup>115</sup> Ibid, pp.10 -11.

be well exploited, and more constructive schemes must be thought of to encourage people to migrate and settle in the Wadi.

2. The east of Belbeis district. To the east of Ismailia Canal, the soil is mainly sandy but rich in organic matter, as shown in the analysis of sample VII<sup>116</sup>. The land here is comparatively higher, and irrigation from the canals is not easily available. Good underground water supplies, however, seem to exist on the edge of the desert,<sup>117</sup> and agricultural experiments depending for their irrigation upon such supplies have been promising. Large areas in this part of Belbeis district have been exploited, and fruit plantations are particularly flourishing. His Majesty's estate at Inshass and Barakat Orchards are practical proofs of the possibility of the spread of agriculture eastwards in Sharqiya, a fact which is bound to have a far-reaching effect upon the movement and settlement of the population.

3. The remote parts in the east of Faqus. The soil in this part of Faqus is, generally speaking, either fairly good or capable of being easily improved.<sup>118</sup> The position of such areas on the upper reaches of irrigation canals, and their comparatively higher elevation, have left them with a rather precarious water-supply for summer crops. The real development of this part of Sharqiya depends upon the increase in the amount of water reserved for the dry season. Provisional remedies, however, may be of some value. Artesian wells and adjusted crop-rotation, with its need of water distributed all the year round, will be of great benefit. The construction of the canals should be reconsidered and the side bends of the streams removed. People on the lower and middle reaches of the canals should be taught to use the water properly. The Egyptian fallah is known to use too much water and to treat all crops at all times in exactly the same manner. He pays no attention to the needs of his neighbour, and overlooks the fact that plants require different amounts of water, and that even the needs of the same plant vary according to its stage of growth.

4. The Barari north of K. Saqr and Faqus. The main causes of the poverty of soil in this region have already been discussed. The process of reclamation of the Barari is a very difficult task, which needs irrigation as well as drainage projects. Because of the low level of this area, fields can be drained only by powerful pumping stations, similar to those of Sarw (N. Dakahlieh) and Belkas (N. Gharbieh). Moreover, it is equally important to secure the necessary water for irrigation. Local conditions have sometimes led responsible persons to think that the inadequacy of the drainage system is the cause of the slow progress of agricultural expansion in the north of the Delta. It is, however, doubtful whether a perfect drainage system would be of much value without adequate

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<sup>116</sup> Appendix I.

<sup>117</sup> Hume, op. cit. Vol. I, pp. 122-123.

<sup>118</sup> See Analyses of samples XIV, XV and XVIII (Appendix I).

irrigation<sup>119</sup>. This shows the great dependence of the future of the Barari on the Nile projects both in Egypt and in the Sudan. At the same time one has to bear in mind that it is neither proposed, nor would it be advantageous, to utilize the entire increase of water in irrigation lands which can be reclaimed in the north of the Delta. Part of the increase is to be employed in ameliorating supplies to the area now under cultivation<sup>120</sup> and consequently the reclamation works will progress very slowly. The question of the underground water-supply in this part of Egypt should be reconsidered. As Dr. Hume points out, "It requires deeper boring than any undertaken at present to determine whether a favourable water-level exists at depths exceeding 100 metres."<sup>121</sup>

5. Kafr Saqr district south of the Barari. All this area is nominally under cultivation but its productivity is comparatively low and the population settlements are rather small. The water supply and the drainage question are still the main problems, but the latter difficulty is less complicated than it is in the Barari lands. Admitting that pumping is inevitable in draining some tracts between the 1 and 3 contour lines, the existing drainage canals can, with minor alterations and some care, serve the purpose well, especially when the land is above the 3-metres contour. Gravity alone may be enough in most parts, since what is really needed is a decline in elevation of about 3 cm., or even less, in a kilometre.<sup>122</sup>

The development of irrigation and drainage and the expansion of cultivation in all the above parts of Sharqiya are very elaborate and costly matters, and in a country like Egypt the Government alone can carry out such complicated enterprises. In 1920 all questions bearing upon irrigation were studied, technical recommendations made and very ambitious plans drawn.<sup>123</sup> The rapid increase of the Egyptian population was the stimulating factor. But it was soon realised that such ambitious plans were beyond the financial ability of the country. What is really needed now is a practical programme based on close collaboration between irrigation and agriculture authorities.

With the limited resources of Egypt, the extension of irrigation will never solve the population problem. The social and traditional aspects of the

<sup>119</sup> Report on the Work of the Department of Irrigation, 1922, Arabic Translation, p.29.

<sup>120</sup> Ibid p.30. See also Sirry, Hussain Pasha. "Twenty - Year Plan That Aims To win Prosperity From the Waters of the Nile", in Daily Telegraph Supplement, Dec.12, 1938, p.xiii.

<sup>121</sup> Hume, W.F. op.cit. Vol.I, p.122.

<sup>122</sup> Report on the Work of the Department of Irrigation, 1922, Chap.iii.

<sup>123</sup> See The Nile Control, Ministry of Public Works, 1920.

question must be considered, and furthermore the technical side of exploiting the land must be given its full weight in a country where the best has not yet been attained.<sup>124</sup>

But even where reclamation is achieved, it will take time before emigrants from the more densely populated parts of the province move to the new settlements. Officials in the Wadi estate complain of a shortage of labour, and consider this one of the great obstacles in the way of any progressive policy.<sup>125</sup> Meanwhile land companies have always found it extremely difficult to persuade the fallaheen to migrate to the new reclaimed lands in the north of the Delta. The strong family tie and the great solidarity of the Eastern rural community may partly account for this, but other factors must not be overlooked. It is quite obvious that people do not usually change their homes from the desire for mere change. They anticipate wider scopes and must be fairly sure that life under the new conditions will comparatively be more comfortable. So far these anticipations have not been realised in most of the new reclaimed estates. Land turns out to be less remunerative from the tenant's standpoint and the holders often ignore the interests of the peasant. Labourers in most places are not adequately accommodated and no real help is given to them in their new homes. And when the landlord leaves the management of his estate to a bailiff or when everything is left to officials the conditions become even worse. Such facts should not be under-rated and one has to remember that the new settlements, with their peculiar character, require from the manager not only technical efficiency but also social spirit and sound tact. An example of what wise management and real constructive policy can achieve in new reclaimed areas is given in the model estate of H.M. the King of Egypt at Inshass. The young generation of rural Sharqiya - with more education and ambition and under the increasing pressure of economic depression in the village - is more ready to migrate wherever opportunities are anticipated. The town now is the centre of gravity. It will be for the mutual interest of the landlord and the agricultural labourer if the rural exodus can be diverted to the sparsely populated parts east and north of the province.

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<sup>124</sup> "Egypt" in the Report of the League of Nations Economic Committee on the Agricultural Crisis, Geneva, 1931. Vol. II.

<sup>125</sup> This fact is emphasised in one of the reports in the Archives of the Wadi Estate.

# APPLICATION OF THE OPTIMUM CRITERION TO THE POPULATION PROBLEM IN SHARQIYA

Conditions in rural life depend largely on the man-land ratio, and the problems of an agricultural community are closely associated with the relation between the population and the potentialities of the land. Absolute rates of density, however, are of limited value, and many other factors have to be considered in order to ascertain the adjustment or maladjustment of population to natural resources. There may be a consensus of opinion that the province suffers from an excess of agricultural population, but so far nothing can be stated in a precise way. Overpopulation and underpopulation can be ascertained only in relation to what is called the optimum population, a term which, according to Wolfe, means "the population which, with given natural resources, state of arts and standard of working time, will secure the largest possible per capita product of consumers goods."<sup>126</sup> It falls beyond the scope of this study to decide whether this materialistic conception of the optimum is justifiable or whether it is necessary to take into account the other moral values bearing upon human welfare.<sup>127</sup> What is now unanimously agreed upon is the great difficulty, at least for the time being, of developing a technique for measuring the factors of the optimum, and consequently the impossibility of determining the dividing line between under-population and over-population. This fact may be the strongest argument against the practical utility of the optimum criterion in population policies.

The task becomes more difficult when the trend of the optimum is to be ascertained. Since the factors<sup>128</sup> governing this criterion are not static, and since human society is one of highly complex economic dynamics, the optimum must be moving rapidly even in an agricultural community with comparatively stable bases. The movement in real income may be considered a valuable test for the existence of over-population. Unfortunately no information bearing upon the real income of the people of Sharqiya is available, and, therefore, we are

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<sup>126</sup> Wolfe, A.B. "On the Criterion of Optimum Population", in American Journal of Sociology; Vol. XXIX, March, 1934, p.592.

See also

Phelps, Harold A. Principles and Laws of Sociology, 1936, p.195.

<sup>127</sup> The question of "optimum population" is still the subject of many controversial theories in social sciences. It is approached either from the materialistic or the spiritual standpoint. Some writers base their argument on the interests of the individual, others on the welfare of the community as a whole.

<sup>128</sup> These factors can be summarised as follows:-

- (a) Natural resources.
- (b) Constitution, natural endowments and acquired skill, knowledge and habits of the inhabitants.
- (c) Opportunities, internal and external, for economic activity.

See Carr-Saunders, A.M. op.cit. p.330.

in no position to gauge the trend of the optimum even in a very rough way.

Owing to the extremely controversial nature of the optimum criterion and to the impossibility of reducing the problem to terms of scientific and statistical exactitude, one has to be content with the study of symptoms and tendencies. The Report on Population and Agriculture,<sup>129</sup> which was submitted to the European Conference on Rural Life of 1939, studied this phenomenon in rural Europe and discussed in detail the symptoms "that are common to at least several of those regions in which there appears to be agricultural over-population." There common features are: the small size of agricultural holdings, the high proportion of arable area under cereals or other food crops, the low field per unit, the low density of livestock, under-nutrition and cultural stagnation.

Some of these features must be omitted in the application of the same criteria to the study of the population problem in Sharqiya. The local conditions in different parts of the province and the national economic policy have undoubtedly determined the annual rotation, and the area under cultivation for each crop. The influence of the soil and the available water for summer supply, in particular, and the location of the land in the vicinity of some urban centre or within easy reach to certain markets, cannot be overlooked. The spread of large holdings and big estates over a very wide area of Sharqiya must have accelerated the process of adaptability. But the vital part has been played by the great economic revolution of the nineteenth century, which made the country wholly dependent upon and altogether at the mercy of cotton. This, for instance, is the real reason why food crops in the province have, in recent years, fallen short of the requirements of the inhabitants and why for the first time in her history, Egypt, once the granary of the Roman Empire, is importing food-stuffs in large quantities.

As to the other symptoms of over-population (the small size of agricultural holdings, under-nutrition and cultural stagnation), one may safely consider them universal accompaniments of this phenomenon in rural communities. There is no doubt that the pressure on the available arable land, where the society is entirely dependent on limited agricultural resources, and where, according to Islamic law of inheritance, the property has to be divided in a certain way, is bound to reduce the size of holdings to the so-called "dwarf holdings," which are often dispersed in small fragments in different fields.

The maladjustment of agricultural population to the available arable land is inevitably associated with different problems that result from low economic and social standards. This latter fact indicates that a study of the standard of living of the people of Sharqiya may throw much light on the population problem in the province. Actually there is a growing tendency among many writers to pay exclusive attention to the standard of living, which, in their opinion, is the problem of population.<sup>130</sup> (for footnote see next page)

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<sup>129</sup> Robertson, C.J. Population and Agriculture, with Special Reference to Agricultural Over-population. International Institute of Agriculture, Rome, 1939, pp. 52 -61.

## V

## ECONOMIC CONDITIONS OF THE PEOPLE OF SHARQIYA.

T A B L E

Frequency Distribution of Size  
in each of

Particulars		Size of Area												
		x - 1 Feddan.												
		(Kirats) <sup>131</sup>							14	16	18	20	22	24
		1-2	2-4	4-6	6-8	8-10	10-12	12-14	16	18	20	22	24	26
Owners of Land.	No.	1	1	4	5	5	6	2	4	2	5	1	5	1
	%	1.6	1.6	6.7	8.2	8.2	9.8	3.3	6.7	3.3	8.2	1.6	8.2	1.6
Tenants.	No.	1	2	1	1	-	1	-	2	3	-	3	-	-
	%	6.3	12.5	6.3	6.3	-	6.3	-	12.5	18.7	-	18.7	-	-
Part Owners & part Tenants.	No.	-	-	3	3	4	4	2	3	1	-	1	1	2
	%	-	-	10.3	10.3	13.8	13.8	7.0	10.3	3.4	-	3.4	3.4	7.0
Owners(with other re-sources)	No.	1	2	6	1	2	5	2	-	-	-	-	1	1
	%	2.9	5.9	17.6	2.9	5.9	14.7	5.9	-	-	-	-	2.9	2.9
Tenants (with other resources)	No.	1	9	5	1	3	2	3	-	1	1	1	-	-
	%	3.7	33.3	18.5	3.7	11.1	7.4	11.1	-	3.7	3.7	3.7	-	-
Part Owners & Tenants (with other resources)	No.	-	1	-	-	2	2	1	-	1	-	2	-	1
	%	-	5.0	-	-	10.0	10.0	5.0	-	5.0	-	10.0	-	5.0
G. TOTAL	No.	4	15	19	11	16	20	10	9	8	6	8	7	5
	%	2.1	8.0	10.2	5.9	8.6	10.7	5.3	4.9	4.3	3.2	4.3	3.7	2.7

<sup>130</sup> See for instance

(a) Fairchild, H.P. "Optimum Population" in Proceedings of the World Population Conference, 1927, pp.72 - 85.

(b) Wolfe, A.B. "On the Criterion of Optimum Population" in American Journal of Sociology, Vol.XXXIX, March, 1934, pp.585 - 599.



## XXXII

of Land Exploited (Average per person)  
187 households.

per Person.												2-3 fed.	3-4 fed.	4-5 fed.	Over 5 fed.	TOTAL
1 - 2 Feddans																
(Kirats)																
26	28	30	32	34	36	38	40	42	44	46						
-	-	-	-	-	-	-	-	-	-	-						
28	30	32	34	36	38	40	42	44	46	48						
1	1	-	-	1	2	1	-	-	1	2	3	2	1	5	61	
1.6	1.6	-	-	1.6	1.6	1.6	-	-	1.6	3.3	4.9	3.3	1.6	8.2		
-	-	-	-	1	-	-	-	-	-	-	-	1	-	-	16	
-	-	-	-	6.3	-	-	-	-	-	-	-	6.3	-	-		
1	1	1	-	-	1	-	1	-	-	-	-	-	-	-	29	
3.4	3.4	3.4	-	-	3.4	-	3.4	-	-	-	-	-	-	-		
-	-	2	1	-	-	1	-	1	-	-	4	1	2	1	34	
-	-	5.9	2.9	-	-	2.9	-	2.9	-	-	11.8	2.9	5.9	2.9		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
1	2	1	-	-	-	-	-	-	1	-	2	-	-	3	20	
5.0	10.0	5.0	-	-	-	-	-	-	5.0	-	10.0	-	-	15.0		
3	4	4	1	2	2	2	1	1	2	2	9	4	3	9	187	
1.6	2.1	2.1	0.5	1.1	1.1	1.1	0.5	0.5	1.1	1.1	4.9	2.1	1.6	4.9		

131

One feddan = 24 Kirats.

We may now conclude this study by some remarks on the economic conditions of the people of Sharqiya in the light of the empirical data which were gathered during the socio-economic survey of the Province in 1939.<sup>132</sup> Investigations have almost been confined to the agricultural element of the population. This may be justifiable when it is borne in mind that we are dealing with a community over 72% of whose population derive their subsistence, in one way or another, from agriculture.

### Land Holdings

The outstanding feature revealed by the figures for the landowners in Sharqiya (1937-8) is the very high percentage - 69% - of smallholders (one feddan and less) as against the insignificant proportion - 0.5% - of large holders (over 50 feddans). But whereas the former possess 13.6% of the total arable area, the latter possess 34%, a fact which shows very clearly how extremely unequally the land is distributed among the people of the province.

The number of "pygmy holdings" has been steadily increasing, and it is important to notice that a great proportion of even such holdings is of less than 0.5 feddan. Table XXXII, for instance, gives the frequency distribution - in our sample - of areas of land exploited per each member of the household. It indicates that whereas more than 25% of the persons examined are exploiting holdings of  $x - 0.25$  feddan, only 13.5% work on holdings of 2 feddans and over.

### Household Capital

The poverty of the majority of the people of Sharqiya is also revealed in the distribution of capital invested either per household or per person. Table XXXIII indicates that the capital of great numbers in our sample (53.1%) does not exceed £E50, that more than 10% have no capital, and that only 2.7% have capital of over £E500. The poorest elements are obviously the agricultural labourers, of whom about 60% have no capital at all.

As to the capital invested in different cases of our sample, the outstanding feature is the significant proportion of capital invested in land, a fact which is understandable in a community where land has always been venerated and where people do not realize how remunerative other enterprises may be.

### Family Income

The great poverty of the majority of our sample is best revealed in the distribution of income per caput (Table XXXIV). More than 40% are living on annual incomes of  $x - £E5$ , while only 5.5% have annual incomes of more than £E50. The position of labourers and tenants is still worse. The former are very poorly paid; the latter do not usually make any significant profit from

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<sup>132</sup>For details see Ammar, Abbas M. "Conditions of Life in Rural Sharqiya," in Sociological Review, Vol. XXXII, July-October, 1940.

the land owing to the high rents and the low prices received for their crops.

The most regrettable feature is the complete absence of any agricultural industry or domestic handicraft. The by-products also are greatly neglected, and the fallaheen, despite their hard work and ceaseless efforts, are unable to make the best of their limited land. They have been neglected for centuries, and the type of education which the young generation is given in rural Egypt is unsuitable for the improvement of technical efficiency.

### Family Expenditure

The frequency distribution of annual total expenditure per person in different community groups (Table XXXV) indicates the extremely difficult conditions under which the people of Sharqiya are living. 32.4% of the total sample spend £E5 or less per annum, 48.1% spend from £E5.1 - £E15, and only 19.5% can spend more than £E15 in the whole year.<sup>134</sup> Out of 222 households, only 3 have given annual expenditures exceeding £E50 per person.

Food naturally is the main item in expenditure, but even here about 20% of the sample have to spend £E2 or less (per person) a year. Maize is the food crop of rural Sharqiya, milk is often turned into butter for sale, and poultry and eggs are usually sold. The proportion of food expenditure allotted to food of animal origin is negligible.

The amounts spent on tea, coffee and cigarettes are rather great if examined in relation to the total expenditures. Clothing, fuel, lighting are of secondary importance in family expenditures. As to the expenditure on miscellaneous items (i.e. weddings, funerals, festivals etc.,) one may notice that this comes after expenditure on food, a feature which indicates the improvidence of many peasants.

x       x       x

The above brief remarks prove beyond doubt that we are dealing here with primary poverty whatever criterion we may choose. Many of the people may have been responsible for their own misfortunes, but in most cases the majority are the victims of factors beyond their control. The unjust traditional distribution of wealth, the disequilibrium between human fertility and land potentialities, the apathetic outlook of the fatalist fallah, the misunderstanding of the real needs of the rural community and the vague ideas of social reconstruction in the minds of high officials and authoritative circles, are the major factors underlying the deplorable conditions of our fallaheen.

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<sup>134</sup> House rents have not been included, because almost all the fallaheen live in their own houses, and agricultural labourers, if working on big estates, are accommodated in lodgings for a nominal rent.

T A B L E  
Frequency Distribution of Capital  
in each of

Particulars		No Capital	x - 10	11 - 20	21 - 30	31 - 40	41 - 50
Owners of Land.	No.	-	-	1	-	4	3
	%	-	-	1.7	-	6.9	5.2
Tenants.	No.	1	11	2	1	-	-
	%	6.3	68.7	12.5	6.3	-	-
Part Owners and Part Tenants.	No.	-	-	1	6	5	1
	%	-	-	3.4	20.7	17.3	3.4
Owners with other resources.	No.	-	1	1	1	3	2
	%	-	3.1	3.1	3.1	9.4	6.3
Tenants with other resources.	No.	2	24	2	-	-	-
	%	7.1	85.8	7.1	-	-	-
Part Owners and Tenants with other resources.	No.	-	-	-	3	3	2
	%	-	-	-	15.0	15.0	10.0
Agr. Labourers etc.	No.	21	15	1	-	-	-
	%	56.8	40.5	2.7	-	-	-
General Total.	No.	24	51	8	11	15	8
	%	10.9	23.2	3.6	5.0	6.8	3.6

XXXIII

(Average per person): in E.£.<sup>133</sup>  
220 households.

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51 - 75	76 - 100	101-150	151-200	201-250	250-300	300-400	400-500	Over 500	TOTAL
7	14	5	6	4	6	2	2	4	58
12.1	24.2	8.6	10.4	6.9	10.4	3.4	3.4	6.9	
-	-	-	-	-	-	-	-	1	16
-	-	-	-	-	-	-	-	6.3	
7	5	2	-	-	-	1	-	1	29
24.1	17.3	7.0	-	-	-	3.4	-	3.4	
5	6	4	1	1	1	2	4	-	32
15.7	18.8	12.5	3.1	3.1	3.1	6.3	12.5		
-	-	-	-	-	-	-	-	-	28
-	-	-	-	-	-	-	-	-	
2	2	2	1	1	-	3	1	-	20
10.0	10.0	10.0	5.0	5.0	-	15.0	5.0	-	
-	-	-	-	-	-	-	-	-	37
-	-	-	-	-	-	-	-	-	
21	27	13	8	6	7	8	7	6	220
9.6	12.3	6.0	3.6	2.7	3.2	3.6	3.2	2.7	

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pence more than the English pound.

T A B L E

Frequency Distribution of Annual Income  
of 219

Particulars		x - 5	6 - 10	11-15	16-20	21-25	26-30	31-35
Owners of Land.	No.	14	18	11	2	4	2	1
	%	24.6	31.6	19.3	3.5	7.0	3.5	1.8
Tenants.	No.	10	2	1	-	1	-	-
	%	71.4	14.4	7.1	-	7.1	-	-
Part Owners and Part Tenants.	No.	9	13	3	1	-	-	-
	%	33.3	48.2	11.1	3.7	-	-	-
Owners(with other resources).	No.	5	8	7	3	1	4	-
	%	13.9	22.2	19.4	8.3	2.8	11.1	-
Tenants (with other resources).	No.	22	6	-	-	-	-	-
	%	78.6	21.4	-	-	-	-	-
Part Owners and Tenants (with other resources).	No.	5	4	2	1	2	1	-
	%	25.0	20.0	10.0	5.0	10.0	5.0	-
Agr.Labourers etc.	No.	25	8	4	-	-	-	-
	%	67.6	21.6	10.8	-	-	-	-
General Total.	No.	90	59	28	7	8	7	1
	%	41.1	26.9	12.7	3.2	3.7	3.2	0.5

## XXXIV.

(Average per person); in E.L. in each households.

36-40	41-50	51-75	76-100	101-125	126-150	151-175	176-200	Over 200	TOTAL.
-	3	-	-	-	1	-	-	1	57
-	5.3	-	-	-	1.8	-	-	1.8	
-	-	-	-	-	-	-	-	-	14
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	1	27
-	-	-	-	-	-	-	-	3.7	
1	2	2	1	2	-	-	-	-	36
2.8	5.6	5.6	2.8	5.6	-	-	-	-	
-	-	-	-	-	-	-	-	-	28
-	-	-	-	-	-	-	-	-	
-	2	-	1	-	1	-	1	-	20
-	10.0	-	5.0	-	5.0	-	5.0	-	
-	-	-	-	-	-	-	-	-	37
-	-	-	-	-	-	-	-	-	
1	7	2	2	2	2	-	1	2	219
0.5	3.2	1.0	1.0	1.0	1.0	-	0.5	1.0	

T A B L E

Frequency Distribution of Annual Total Expendit  
of 222

Particulars		x-2.5	2.6-5	5.1-7.5	7.6-10	10.1-12.5
Owners of Land.	No.	2	7	14	10	6
	%	3.2	11.3	22.6	16.1	9.7
Tenants.	No.	-	8	4	1	-
	%	-	61.5	30.8	7.7	-
Part Owners & Part Tenants.	No.	1	5	11	4	2
	%	3.4	17.2	38.0	13.8	6.9
Owners with other resources.	No.	2	2	6	5	5
	%	5.9	5.9	17.6	14.7	14.7
Tenants with other resources.	No.	4	13	9	1	2
	%	14.0	44.8	30.8	3.4	7.0
Part Owners & tenants with other resources.	No.	-	3	3	3	2
	%	-	15.8	15.8	15.8	10.5
Agr.Labourers etc.	No.	5	20	5	3	2
	%	13.9	55.5	13.9	8.3	5.6
General Total.	No.	14	58	52	27	19
	%	6.4	26.0	23.6	12.0	8.5



XXXV.

ure (in E.£.); Average per person in each households.

12.6- 15	15.1- 20	20.1- 25	25.1- 50	Over 50	TOTAL
3	13	2	3	2	62
4.8	21.0	3.2	4.8	3.2	
-	-	-	-	-	13
-	-	-	-	-	
2	1	-	2	1	29
6.9	3.4	-	6.9	3.4	
1	4	4	5	-	34
2.9	11.8	11.8	14.7	-	
-	-	-	-	-	29
-	-	-	-	-	
2	2	1	3	-	19
10.5	10.5	5.3	15.8	-	
1	-	-	-	-	36
2.8	-	-	-	-	
9	20	7	13	3	222
4.0	9.0	3.2	5.9	1.4	

## APPENDICES.

## APPENDIX I.

Mechanical Analysis of Soils from Different Parts of Sharqiya.\* (Calculated according to the English Pipette Method, Robinson's).

By

Abdallah Zayn El-Abedin.

Locality.	Kind of sample and place.	S a n d		Silt	Clay	Loss by solution in acid.	Carbonates.	Organic matter & experimental error.	Hygros-copic water.	Total	Remarks.
		Coarse	Fine								
I. Tel-El-Kibir.	Piece No. 17	2.02	9.48	14.0	58.0	2.46	7.88	0.13	6.03	100	Heavy clay soil, alkaline, very difficult to improve.
II. "	" " 4	1.13	20.09	29.5	28.5	2.07	<u>13.82</u>	0.24	4.65	100	Calcareous, clay soil, very difficult to improve.
III. "	" " 16	24.30	18.35	6.5	45.5	1.02	2.28	-	3.45	101.4	Loam-clay soil, fairly good.
IV. "	" " 3	0.76	15.45	21.0	42.5	1.24	<u>11.77</u>	2.95	4.33	100	Calcareous, clay soil, difficult to improve.
V. "	Taftish Orchard.	59.72	19.87	4.5	11.0	0.65	1.15	0.89	2.22	100	Sandy soil, good, poor, in organic matter.
VI. Inshassa.	Cultivated land.	45.10	22.25	4.0	19.5	1.19	0.09	<u>3.76</u>	4.11	100	Sandy soil, good, rich in organic matter.
VII. "	El-Mo-tarid	16.62	12.88	13.0	47.5	1.23	3.28	1.97	3.52	100	Clay soil, fairly good.

\* See Map No. II.

VIII. El- Qurein. representa- tive sample.	62.95	13.89	-	16.0	0.92	0.43	3.73	2.08	100	Sandy soil, good, rich in organic matter.
IX. Talraq. Dair El- Nahieh & El-Tawil	13.85	12.74	<u>12.55</u>	<u>50.0</u>	1.13	1.18	5.57	4.03	101	Clay soil, good but heavy.
X. Kafr Saqr. Rep. Sample.	1.25	24.77	<u>23.0</u>	<u>42.5</u>	1.41	2.78	0.20	4.09	100	Clay soil, poor in organic matter.
XI. Bel beis. " "	4.04	10.39	<u>23.5</u>	<u>51.5</u>	1.27	2.04	0.18	7.08	100	Heavy clay soil, poor in organic matter.
XII. El- Halawat. vated land.	2.80	13.87	<u>37.5</u>	<u>37.0</u>	1.02	2.84	0.69	4.28	100	" " "
XIII. El- Farou- kiah. Borah.	3.10	12.18	<u>32.5</u>	<u>42.0</u>	1.27	2.09	0.17	6.49	99.8	" " "
XIV. El- Rep. Salhieh Sample.	57.61	23.15	-	13.0	0.72	0.99	1.70	1.84	99.0	Sandy soil, fairly good.
XV. Manshat " " Bishara.	31.75	23.27	10.5	26.5	1.42	0.89	0.10	5.57	100	Loam-clay soil, can be improved easily.
XVI. San El- Culti- Hagar. vated land.	0.73	15.35	<u>7.0</u>	<u>69.5</u>	1.37	0.65	0.54	4.86	100	Heavy clay soil, poor in organic matter.
XVII. " Be- rari.	0.14	19.13	<u>63.0</u>	<u>7.5</u>	1.39	0.59	2.36	5.89	100	Heavy clay soil.
XVIII. Faqus Rep. Sample.	13.66	15.74	<u>17.5</u>	<u>41.5</u>	1.36	1.39	2.96	5.89	100	Clay soil, fairly good.
XIX. Mashtul El- El-Kadi Qudabi & Dair El-Nah- ieh.	3.13	22.58	21.0	39.5	1.00	2.53	3.54	6.72	100	" " "

I am greatly indebted to my friend Abdallah Zayn El-Abedin Eff. for the analysis of soil samples which I sent to the Laboratory of the Faculty of Agriculture, Found the 1st University, Cairo.

## APPENDIX II.

## FINAL RESULTS OF THE 1937 CENSUS.

Based on figures given in the Egyptian Population Census, 1937, Vol.I.  
Part XIV. Cairo, 1940 - In Arabic.

Numbers of the following tables refer to those of the tables included  
in the text.

TABLE XIII.

Distribution of the Three Functional Age-Groups. (per 1,000 population)

Group	Males	Females	Totals
Under 20	512.6	464.2	488.0
20 - 49	383.9	402.4	393.2
50 & Over	103.5	133.4	118.8

TABLE XIV.

Distribution of Population by Age - Groups. (per 1,000 population)

Age-Groups	Male	Female	Total
Below one year	31.1	29.4	30.2
1 - 4	104.5	108.0	106.3
5 - 9	143.3	136.5	139.8
10 - 14	141.0	114.6	127.5
15 - 19	91.8	74.5	83.0
20 - 29	141.5	156.0	148.9
30 - 39	144.9	148.2	146.5
40 - 49	96.6	97.2	97.7
50 - 59	52.8	59.6	56.1
60 - 69	29.5	38.4	34.0
70 - 79	13.5	20.4	17.0
80 - 89	5.5	10.5	8.0
90 & Over	2.1	4.3	3.0
Not stated	2.0	2.3	2.1

Distribution of the Three Major Age - Groups by Sex.  
(per 1,000 population)\*

District	0 - 14 years			15 - 44 Years			45 & Over		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
Belbeis	420.8	385.0	402.4	423.7	436.3	430.2	154.9	177.7	166.6
Faqus	433.8	404.9	419.2	436.9	433.9	435.4	127.5	158.8	143.3
Hihya.	421.4	379.9	400.2	434.0	439.4	436.8	143.5	179.4	161.9
Kafr Saqr	439.7	397.0	418.1	437.1	442.1	439.7	121.3	158.6	140.3
M.El-Qamh	405.8	376.3	390.8	424.8	433.8	429.4	167.3	187.5	177.6
Zagazig (B).	388.6	417.3	402.5	457.8	442.8	450.5	148.8	135.0	142.1
" (M).	414.7	380.9	397.4	437.9	435.8	436.8	144.7	180.5	163.0
Sharqiya	419.8	388.6.	403.0	434.3	436.8	435.6	143.9	172.4	158.4

\* The not-stated ages are not included.

T A B L E XVIII

Marital Conditions of the Population of Different Districts of Sharqiya.\*  
(per 1,000 population)

District	Male				Female			
	Never Married	Married	Divorced	Widowed	Never Married	Married	Divorced	Widowed
Belbeis	188.0	772.5	14.5	25.0	54.4	712.9	18.6	214.1
Faqus	286.5	677.7	10.9	24.9	109.7	659.8	16.4	214.0
Hihya	246.2	712.7	15.9	25.3	89.9	660.5	23.2	226.4
K.Sagr.	263.8	697.5	14.0	24.7	103.2	652.8	21.3	222.7
M.El-Qamh	207.5	744.1	17.3	31.2	71.1	699.8	24.9	204.2
Zagazig (B).	327.5	635.5	12.7	24.3	134.6	669.0	24.8	171.6
" (M).	244.4	713.6	15.5	26.5	87.0	670.4	19.7	222.9
Sharqiya	245.2	714.0	14.5	26.3	88.2	276.0	20.7	215.1

\* Person under 16 and the non-stated ages are not included.

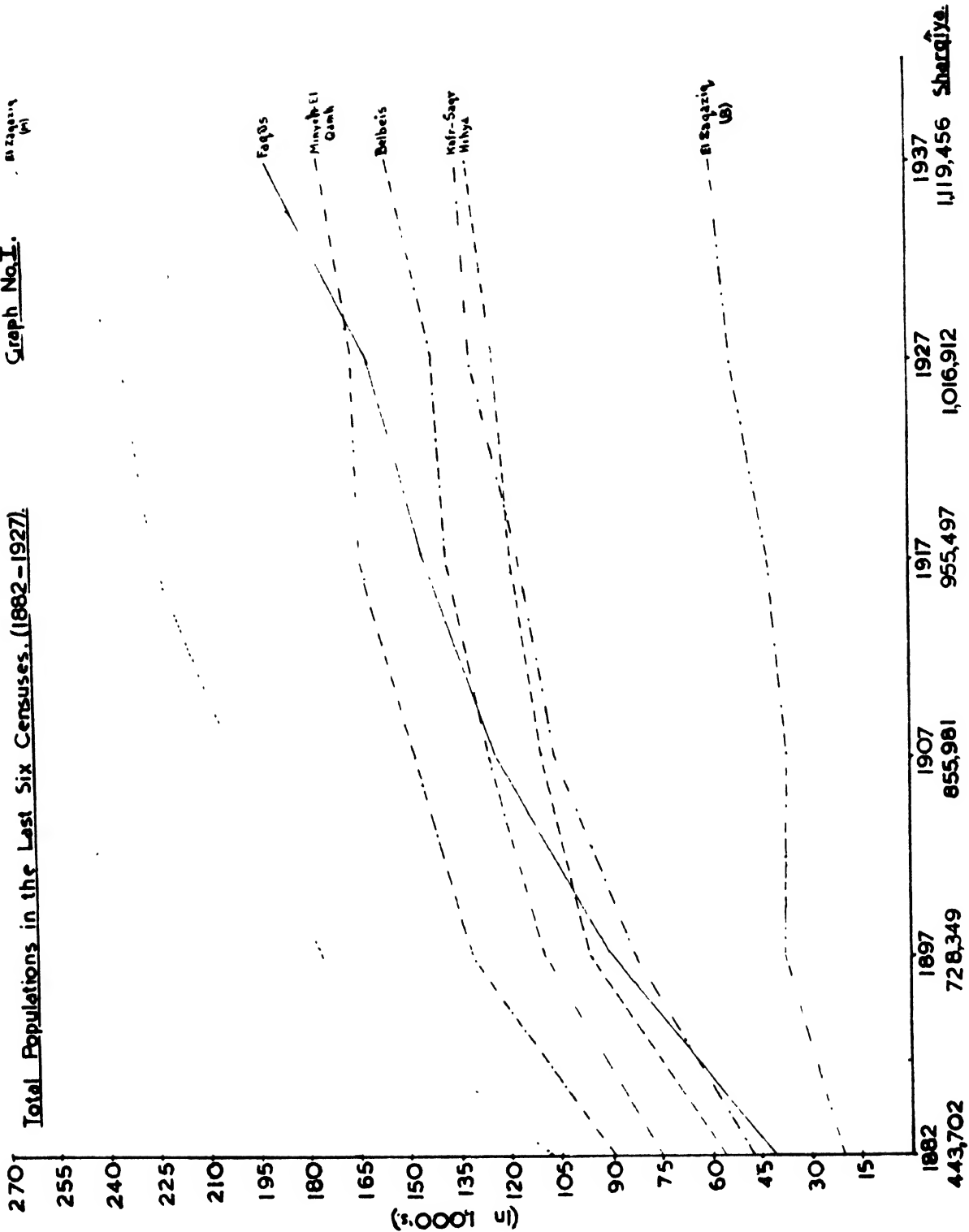
T A B L E    XX

Number of Married Persons and Ratio of  
Marriage.

District	Population	Number of Married Persons.	Ratio of Marriage (per 1,000 Population)
Belbeis	156,509	65,998	421.7
Faqus	193,296	70,729	365.9
Hihya	132,204	51,902	392.6
Kafr Saqr	135,387	50,835	375.5
M.El-Qamh	175,312	73,420	418.8
Zagazig (B.)	59,793	22,205	371.4
" (M.)	268,325	106,261	396.0
Sharqiya	1,120,826	441,350	393.8

Graph No. I.

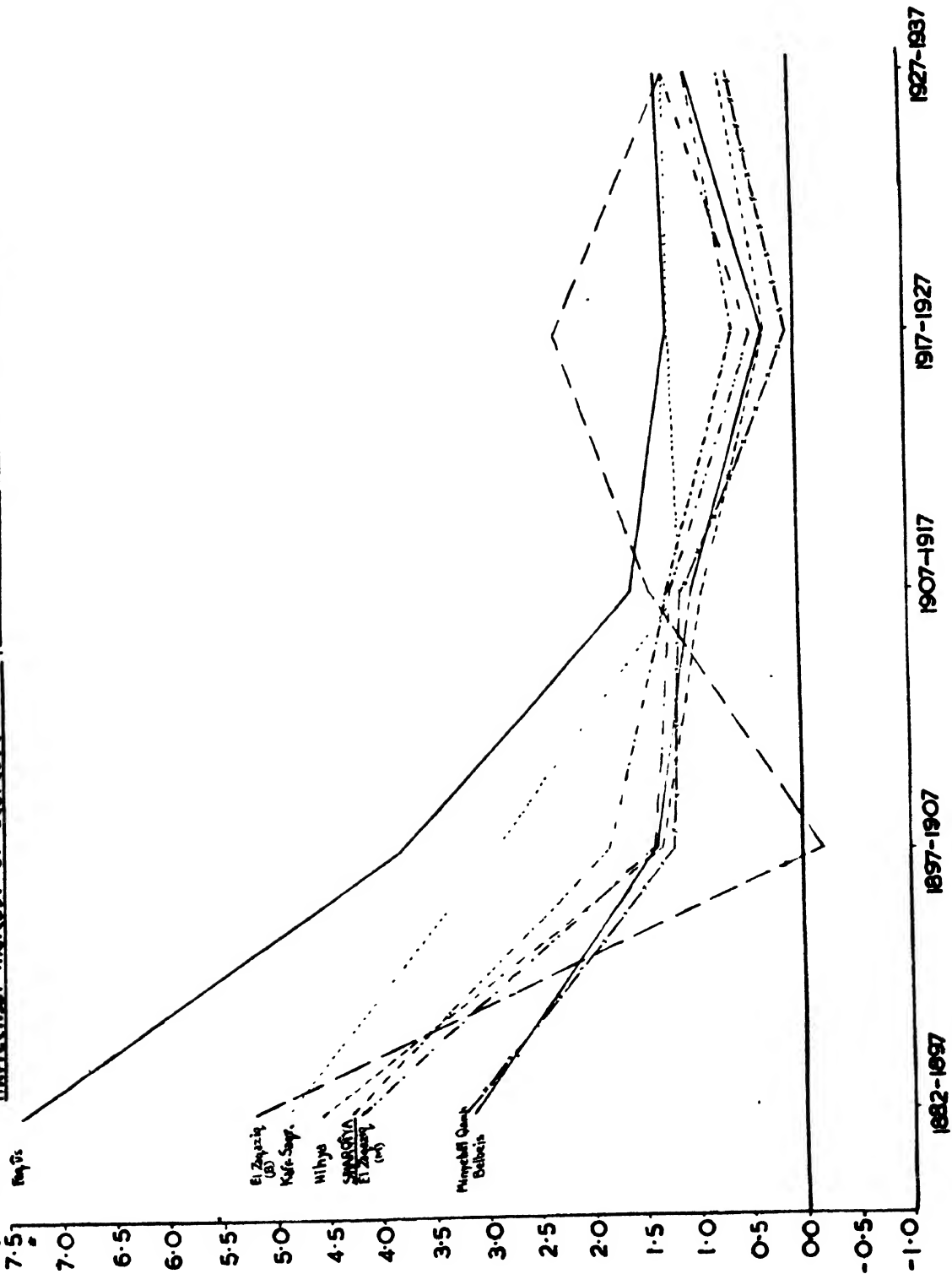
Total Populations in the Last Six Censuses. (1882-1927).





Graph No. II.

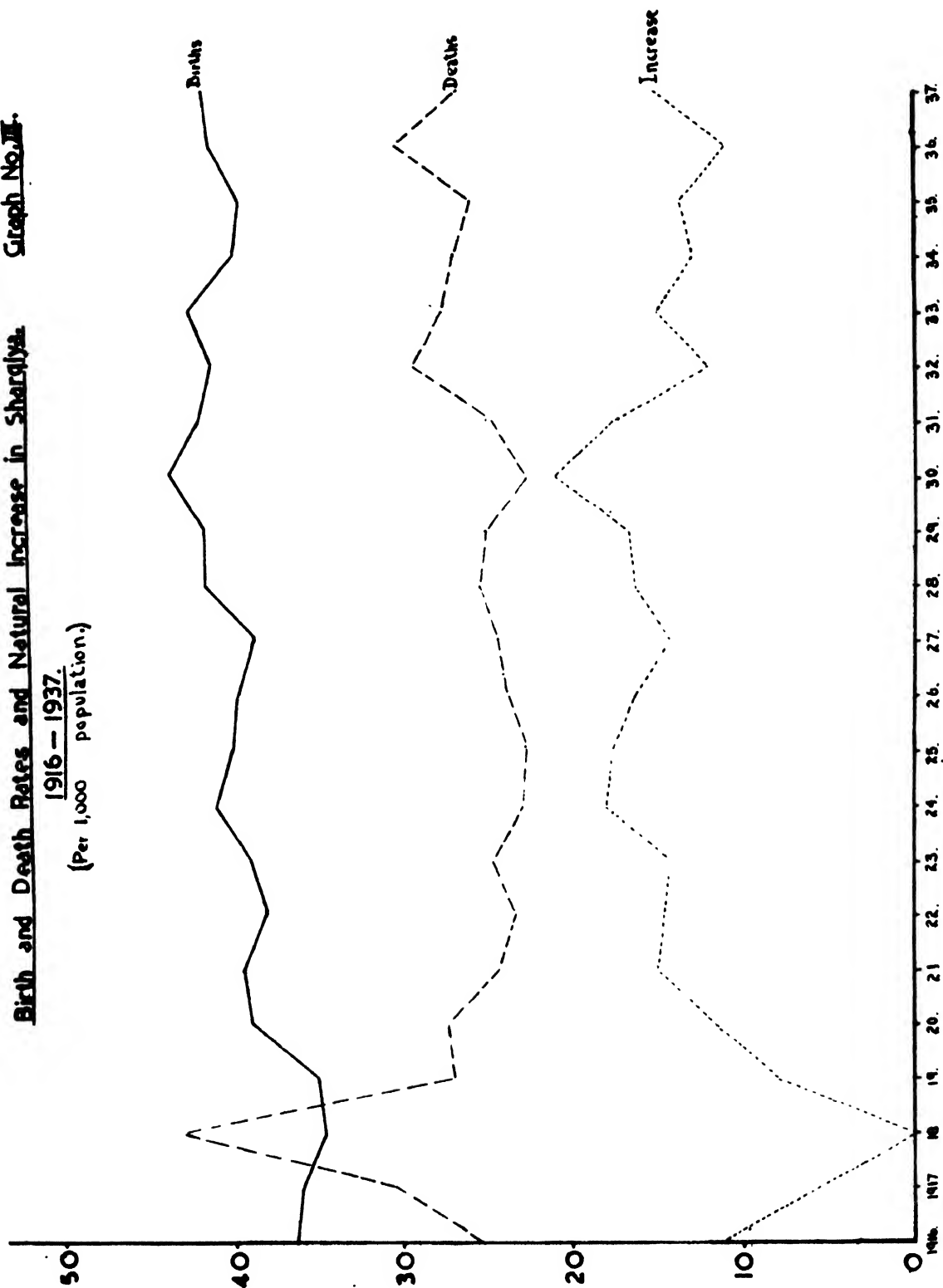
Intercessual increase or decrease in Population. Average rate per cent per Annum.

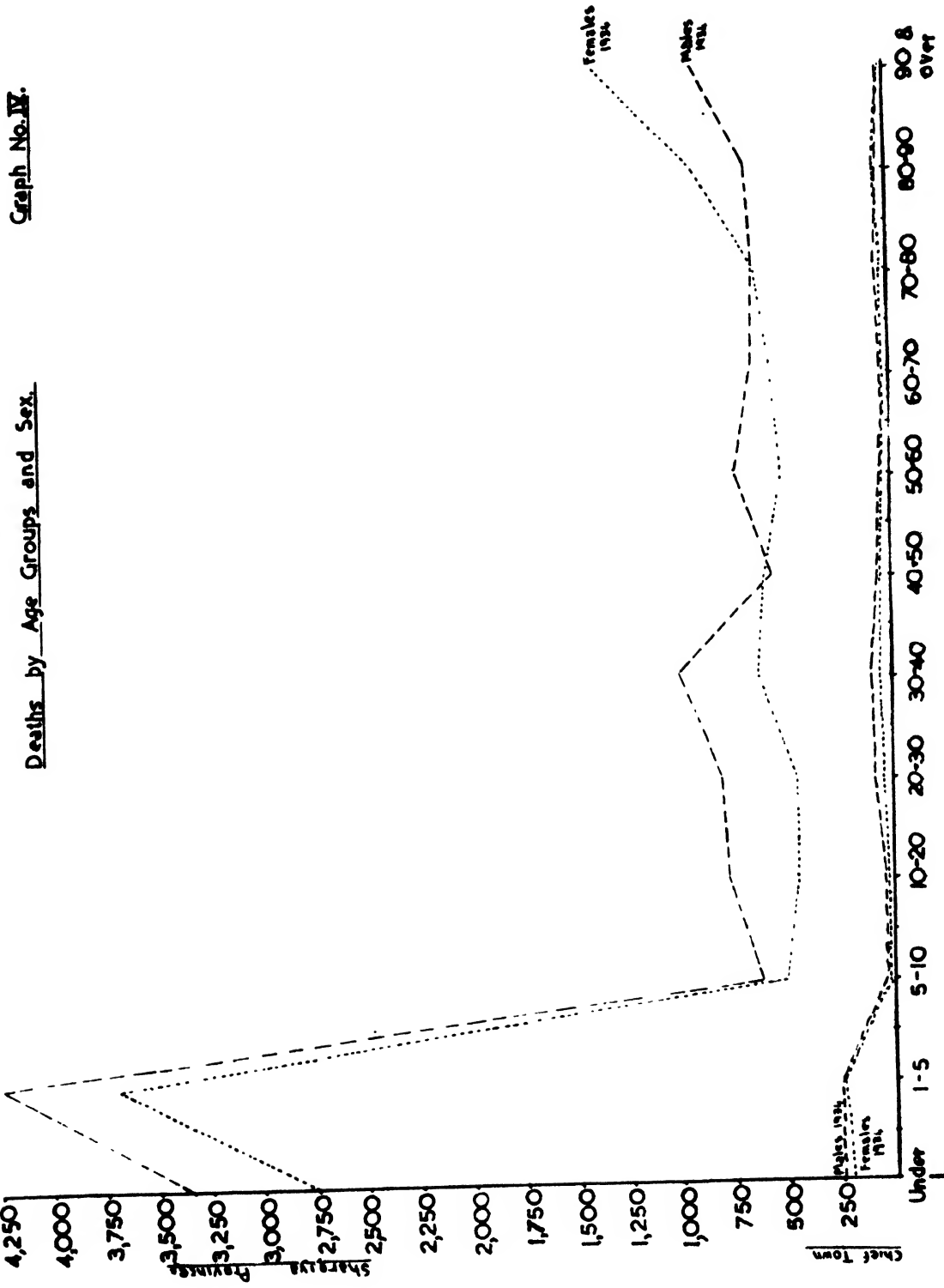


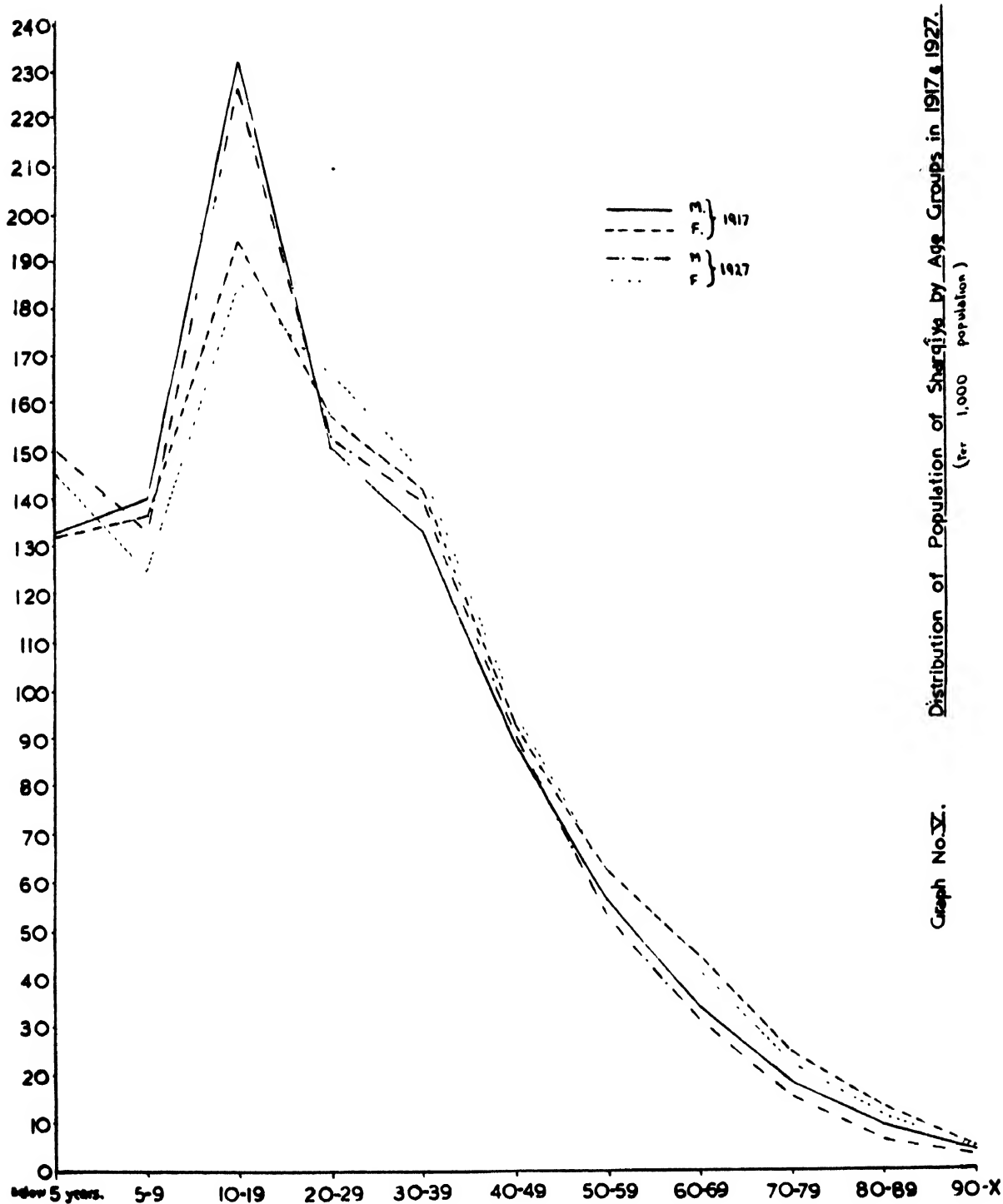
# Birth and Death Rates and Natural Increase in Sharqiyah

Citaph No. III.

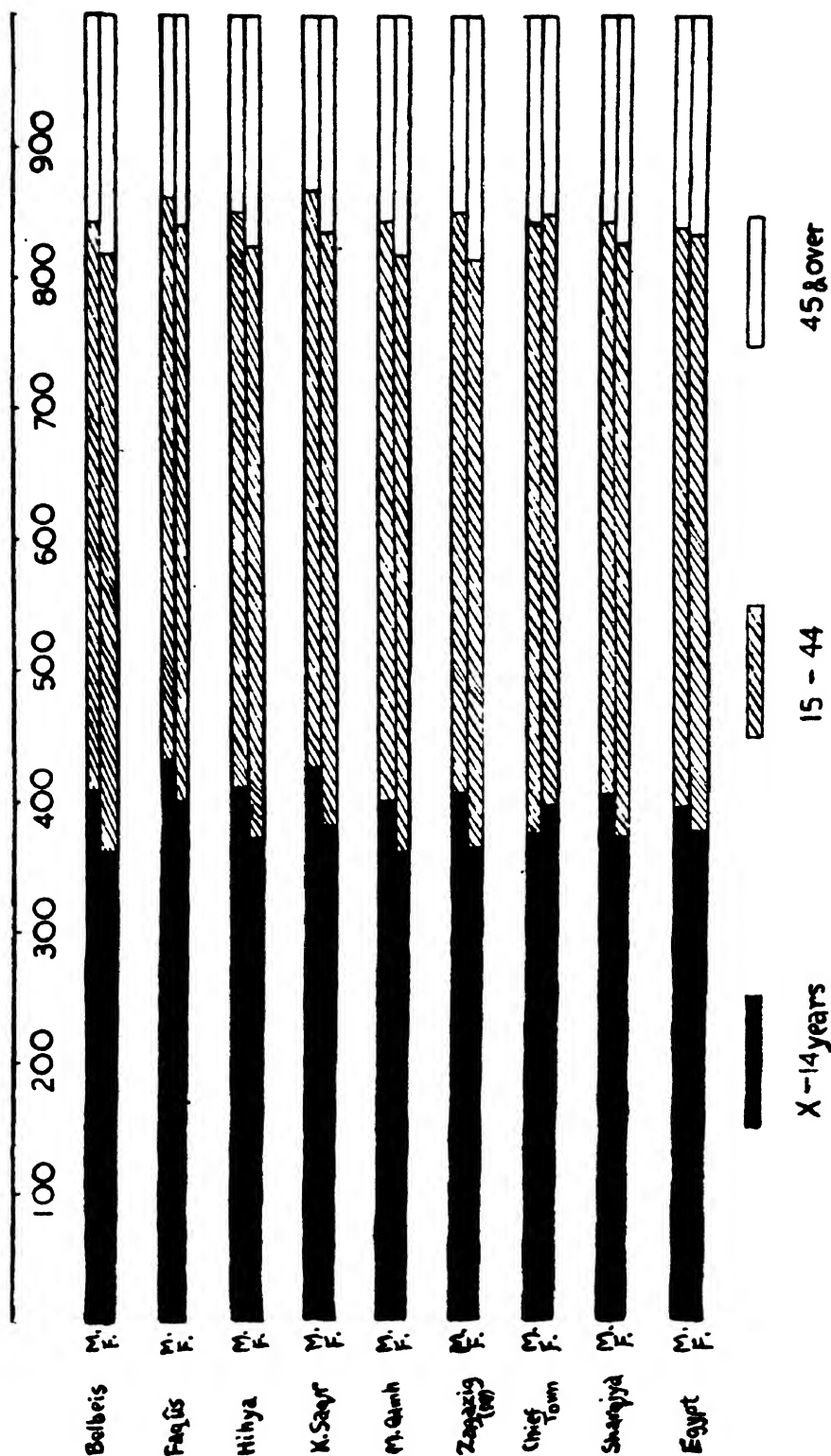
1916 - 1937.  
(Per 1,000 population.)





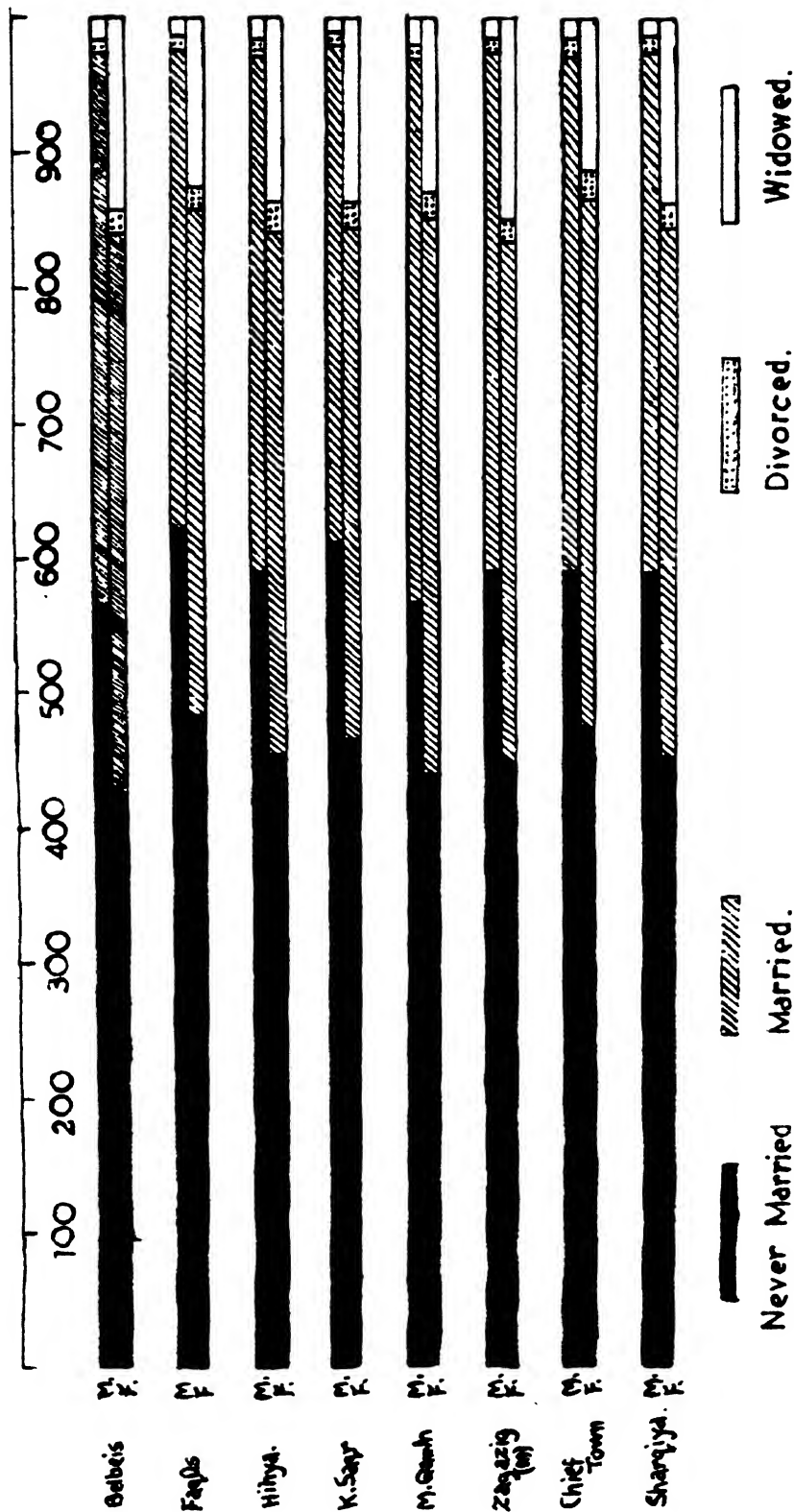


Distribution of the Three Major Age Groups by Sex in Different Districts of Sharqiya and in the Egyptian Population 1927.  
(per 1,000 population)

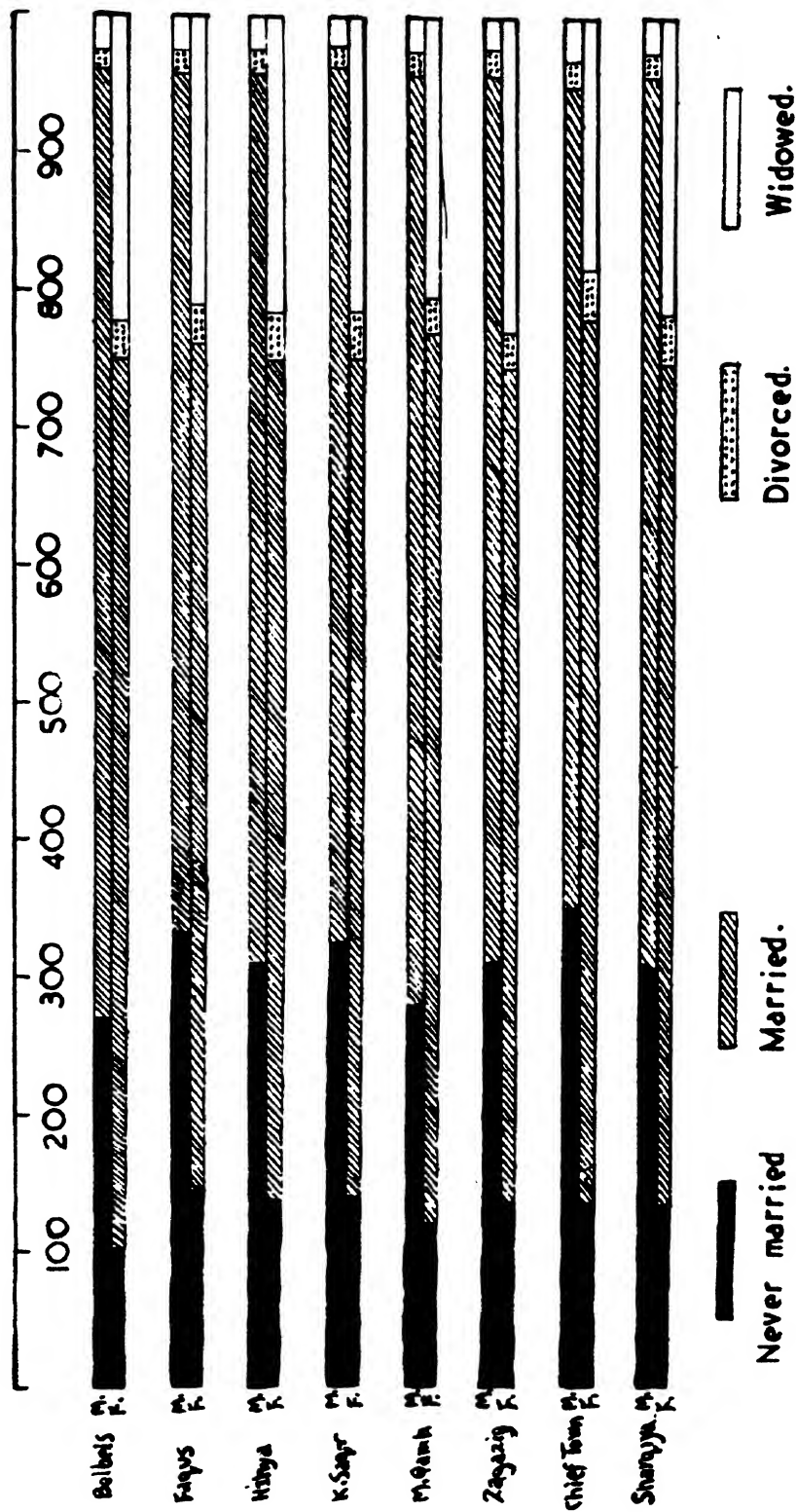


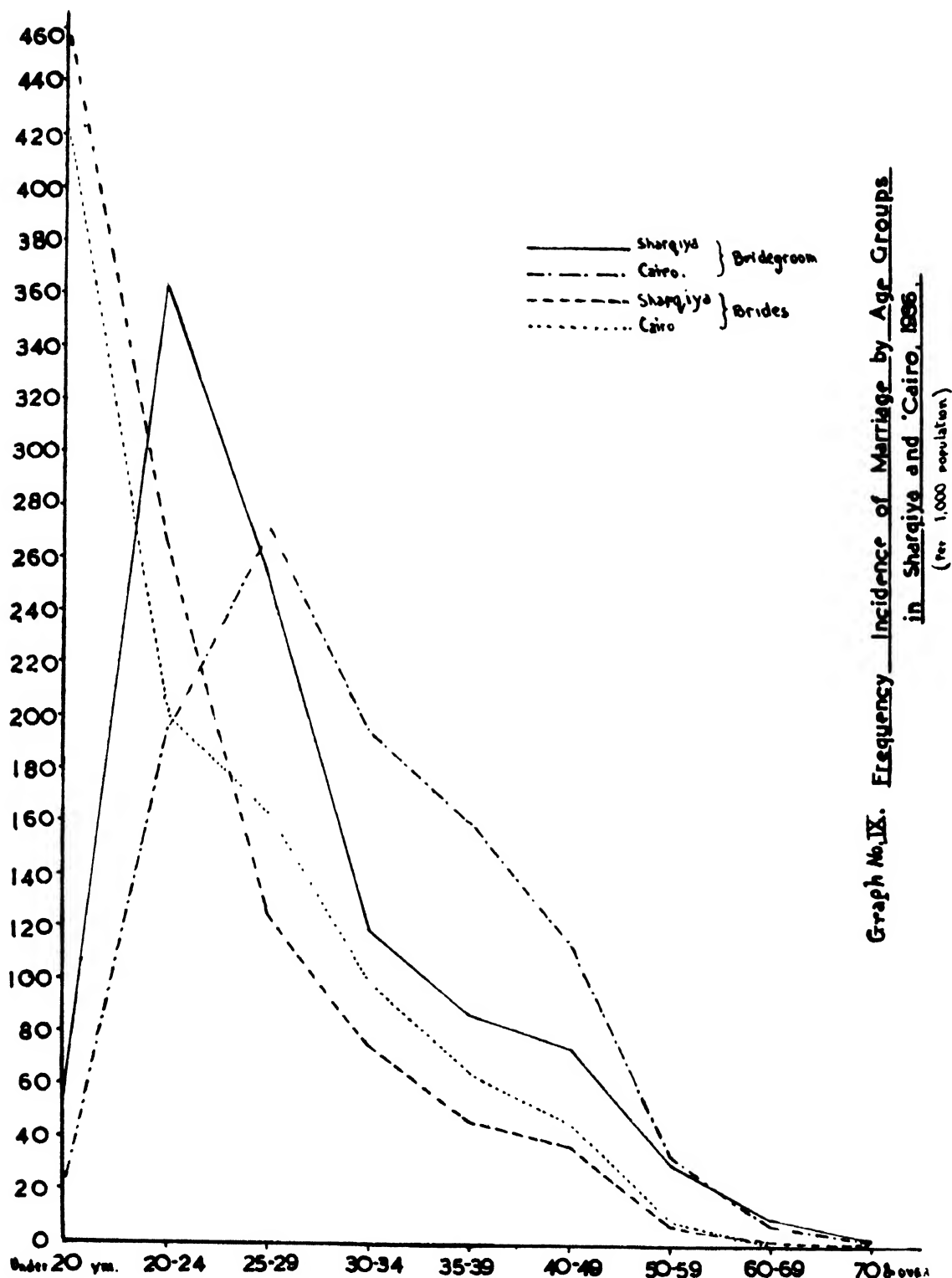
Graph No. VII. Marital Conditions of the Populations of Different Districts of

Sharqiya, 1927.  
(Per 1000 Population)



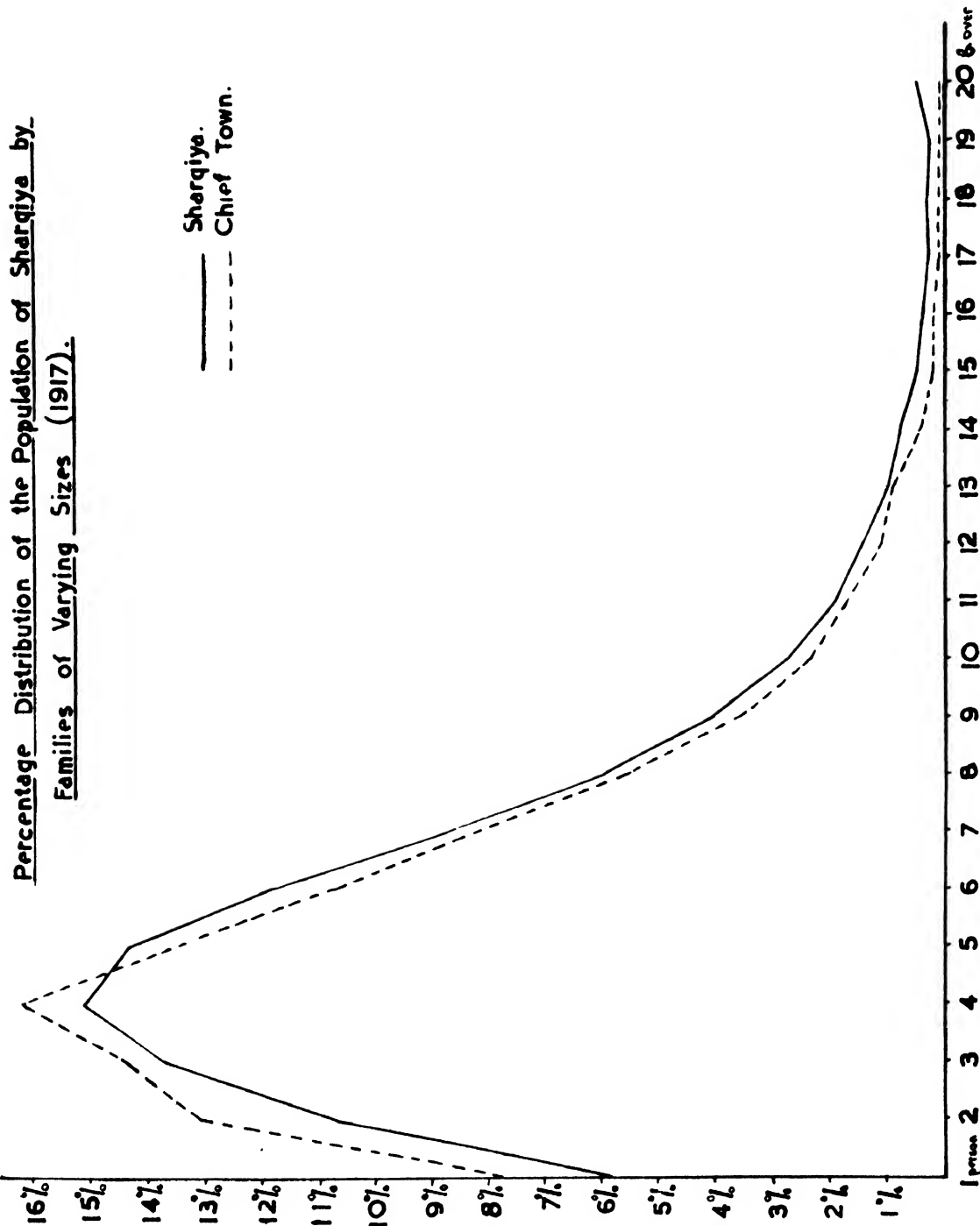
Sharqiya (aged 15 years and upwards), 1927.  
(per 1000 Population)





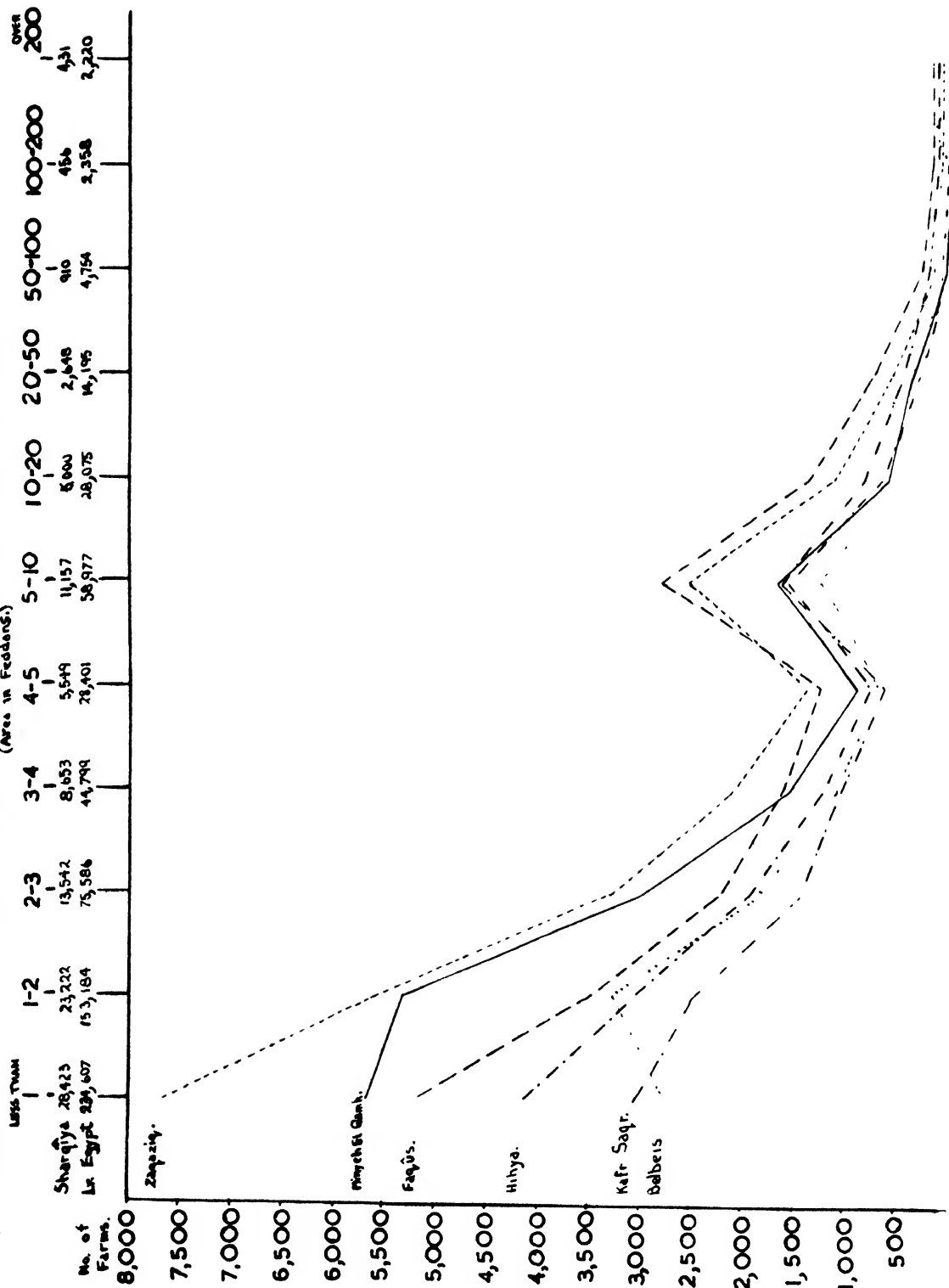


Graph No. X.

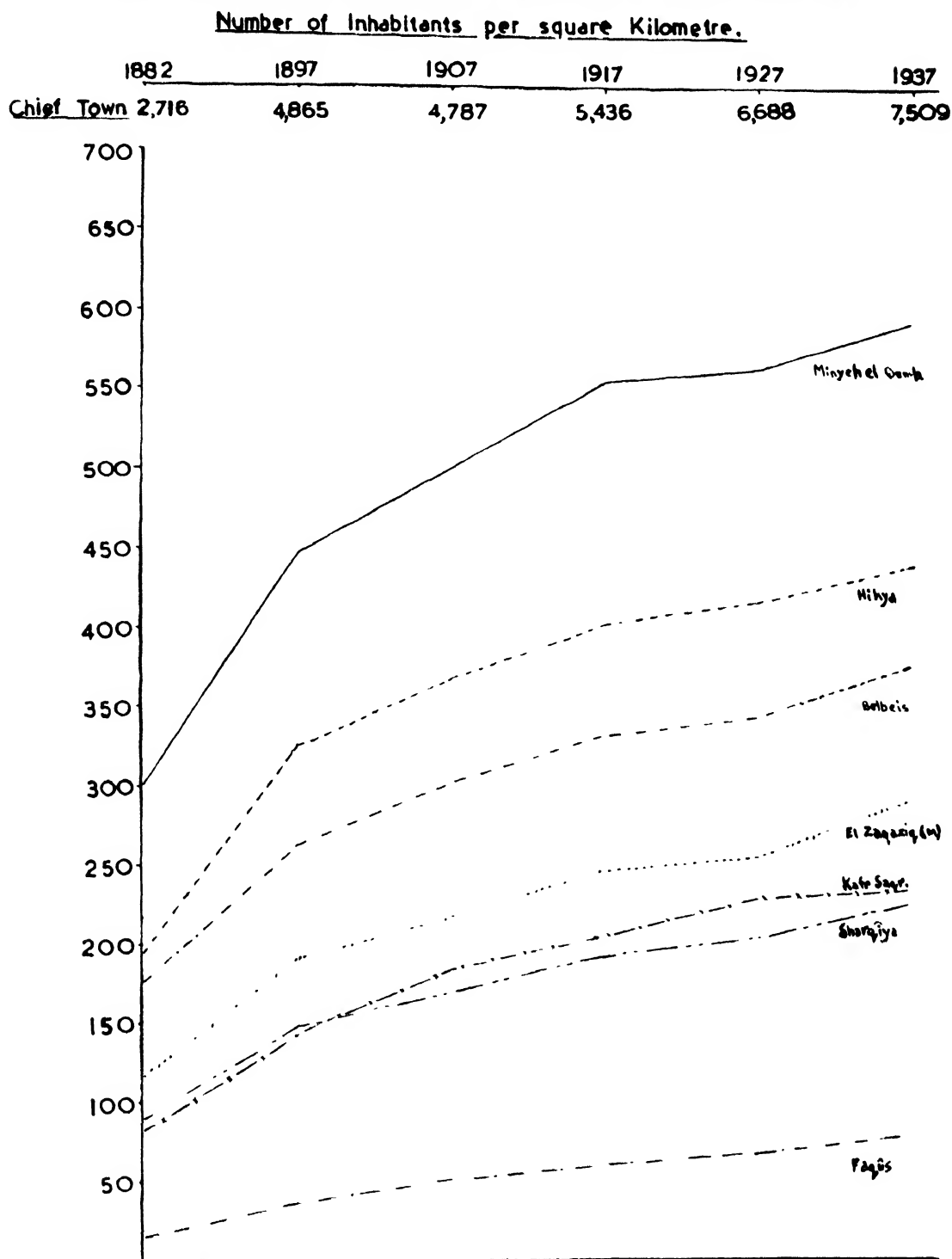


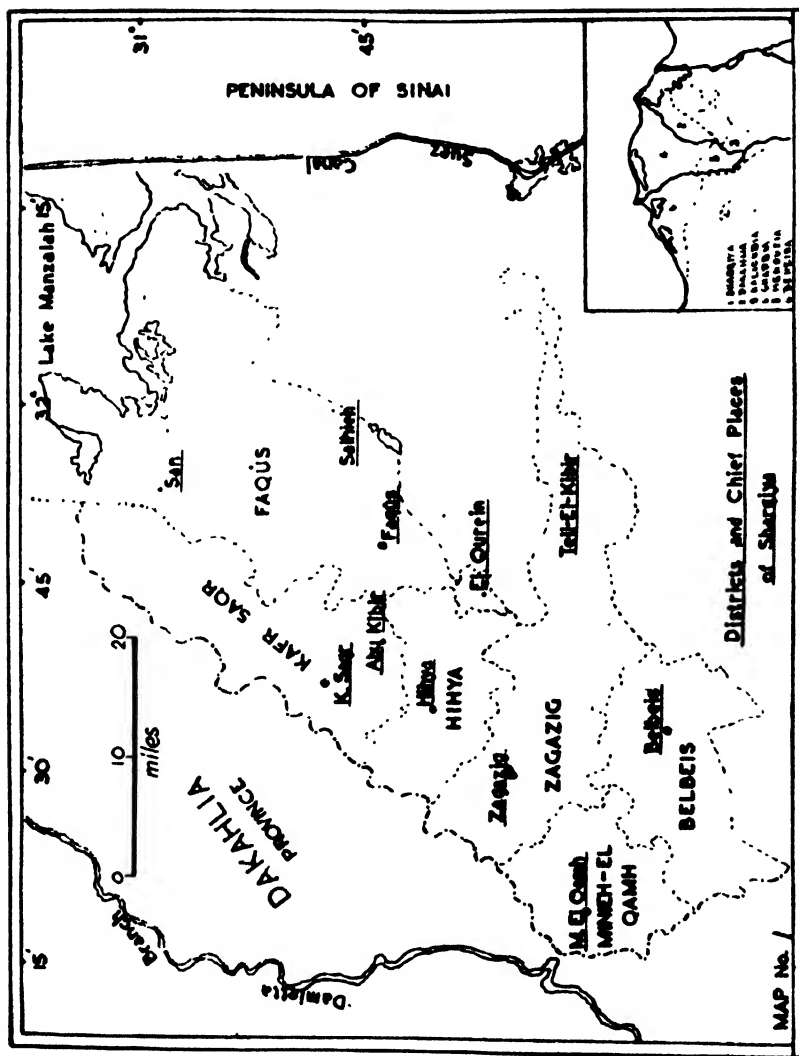
Graph No. XI.

Farms in each District classified by group and area.

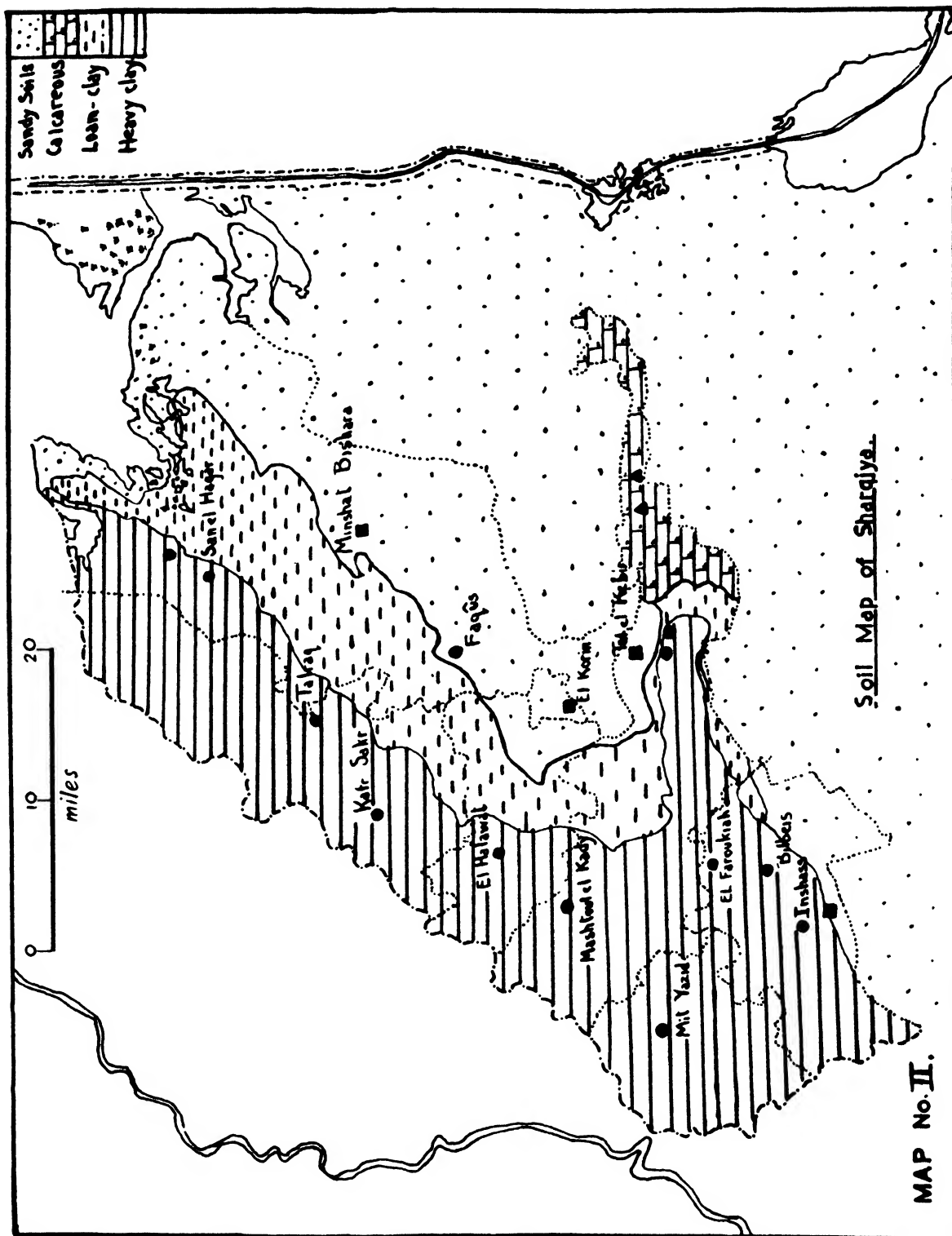


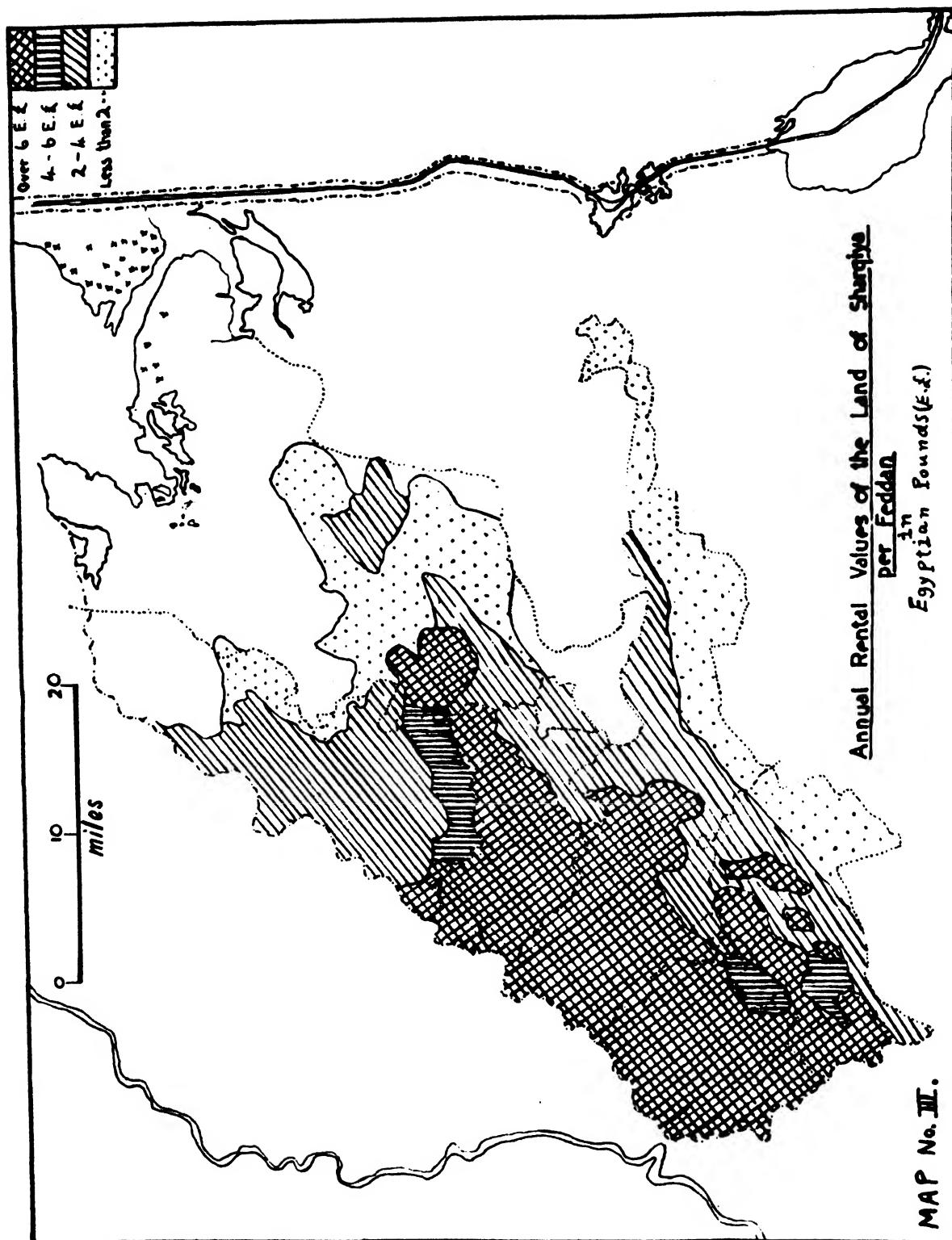
Graph No. XII. Density of Population for each District (for the last 6 censuses)

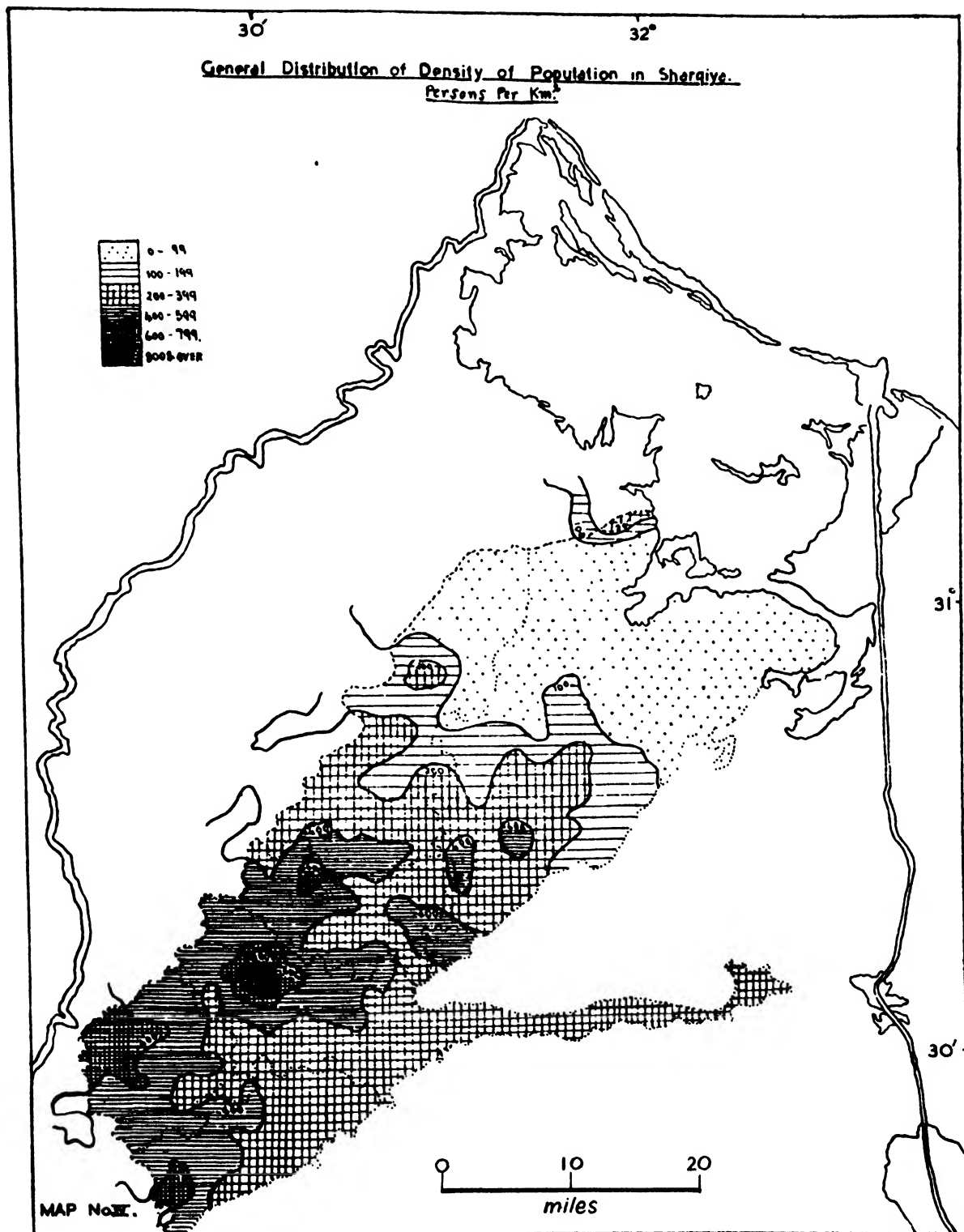




**THE SHARQIYA PROVINCE OF EGYPT**

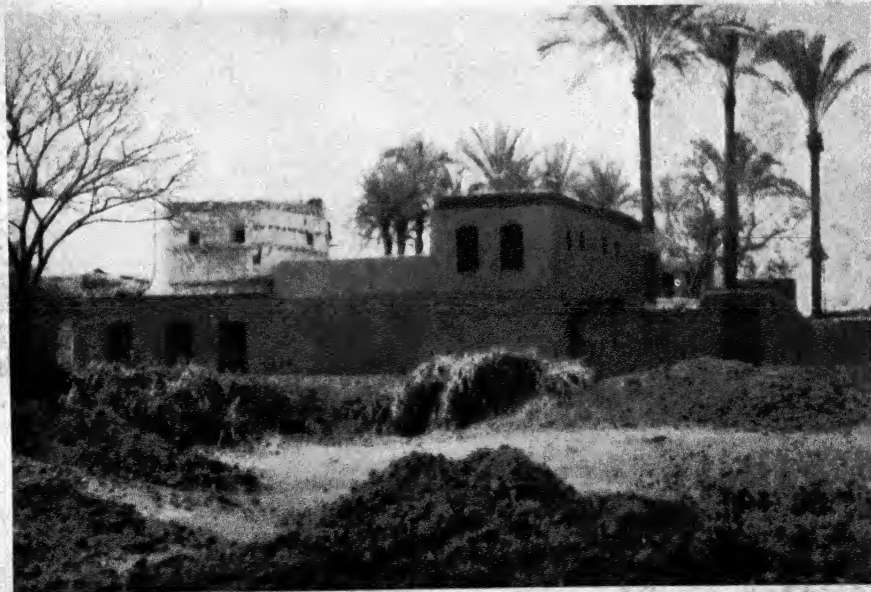








A Street in the village of Abou Hammad



The rural habitat in Sharqiya





A mobile rural hospital







